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ABSTRACT

A study of developmental programs in two-year college occupational education in New York State was conducted: to determine the use of program success criteria other than enrollment numbers and access; to identify policies, plans, or strategies specifically addressing program quality and course effectiveness; to determine whether levels of student deficiency were addressed; and to assess the availability of data to evaluate program effectiveness. The study involved: on-site visitations, telephone consultations, and surveys to collect in-depth data about developmental/remedial programs at selected colleges; and a survey of all two-year colleges in the state offering occupational programs. A total of 48 colleges responded to the survey or participated as sites for the project. Study findings included the following: (1) remedial/developmental instruction was most commonly delivered through formal courses; (2) most colleges established entrance and exit criteria, with a majority using placement testing to determine deficiency levels; (3) tutoring, counseling, targeted advisement, learning centers, and designated transitional courses were the most common forms of instructional support; (4) faculty members were often based in academic departments, though some were specified for developmental programs; and (5) program costs were contingent upon rank of the instructors, scope of the program, resources available, and degree of student deficiencies. (LAL)

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ASSESSMENT OF EFFECTIVENESS

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Developmental Programs in Postsecondary Occupational Education

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JC 850 142

September 1983

Two Year College Development Center
State University of New York at Albany

ASSESSMENT OF EFFECTIVENESS: DEVELOPMENTAL PROGRAMS IN POSTSECONDARY OCCUPATIONAL EDUCATION

(VEA 53-83-0349)

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Bureau of Grants Administration
State Education Department

September 1983

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Organization of Report

This document consists of six major sections plus attachments and appendices. Part I provides a perspective for the study and delineates research concerns. Part II is a description of procedures used to implement the project and collect data. Part III is a summary of data findings organized by major research questions. Part IV consists of discussion of results and more targeted analyses. Part V is a discussion of program effectiveness. Part VI provides a general summary and discussion of major findings and their implications to program assessment and continuing study. Greater detail for selected topics is provided by attachments and appendices.

The final section, Part VI, is recommended to readers who seek an overview of major highlights.

Funding for this project was provided under
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TABLE OF CONTENTS

		Page
I.	Developing A Perspective	1
	Overview of Intent	5
II.	Summary of Methodology	7
III.	Summary of Data Results	10
	Program Profiles	10
	Testing for Placement	21
	Identifying Priority Criteria and Program Success	24
	Identifying the Existence of Systematically Collected Data	29
	Identifying Program Cost	33
iV.	Discussion of Data Results	36
	Priority Criteria as Compared to Program Profiles	36
	Matching Selection of Program Criteria by Institutions	36
	Comparison of Priority Criteria and Data Elements Collected	37
	Comparison of Program Components by Type of Institution	39
	Comparison of Selected Priority Criteria by Institutional Type	42
V.	Rating Program Effectiveness	46
VI.	Concluding Summary & Implications	49
	Summary of Findings	49
	Implications of Findings	52
	Selected References	56
	Attachment I	57
	Attachment II	59
	Attachment III	64
	Appendixes A, B, C and D	65

Figures

		Page
Figure 1:	Frequency of Major Program Components....	11
Figure 2:	Summary of Program Format by Skill Area..	13
Figure 3:	Summary of Credit Status by Skill Area...	15
Figure 4:	Frequency of Supplemental Services.....	17
Figure 5:	Frequency of Entrance, Exit and Placement Elements.....	18
Figure 6:	Source of Developmental Faculty and Budget.....	20
Figure 7:	Characterization of Developmental/ Remedial Programs by Academic and Student Personnel Deans.....	22
Figure 8:	Summary and Priority of Success Criteria Selected by Program Coordinators/Staff...	25
Figure 9:	Summary of Priority Ratings for Criteria by Two-Year College Chief Academic Officers.....	27
Figure 10:	Summary and Priority of Success Criteria Selected by Two-Year College Student Personnel Officers.....	28
Figure 11:	Summary Frequency: Status of Data Collection Relative to Designated Elements.....	30
Figure 12:	Estimated Cost Outline.....	34
Figure 13:	Matching Selections of Three Major Program Criteria.....	38
Figure 14a:	Summary of Program Components As Related to Institution Type.....	40
Figure 14b:	Summary of Supplemental Services by Institutional Type.....	40
Figure 15:	Clustering of Program Criteria by College Type.....	43

ASSESSMENT OF EFFECTIVENESS: DEVELOPMENTAL
PROGRAMS IN POSTSECONDARY OCCUPATIONAL EDUCATION

I. Developing A Perspective

During the 1950's approximately 17% of all jobs required workers to transmit, receive and utilize information. In contrast, in the 1980's 50% of the jobs require workers to process information. This requirement assumes skills learned primarily through formal education. As a result, students in postsecondary education who are deficient in basic academic skills such as reading, writing, math are severely limited in qualifying for many employment opportunities. In an earlier time, these individuals probably would not have graduated from high school and most certainly, not entered college (CPR 1983, Cross 1982).

During the past 20 years, two-year colleges, particularly community colleges, have experienced significant enrollment increases. In the early 50's two-year institutions served about one-fourth of high school graduates, compared to approximately one-half of 70's graduates. Students with difficiencies in basic skills constitute a part of this increased enrollment. As a result, guiding and teaching students unprepared for a "traditional level" of study continues as a growing problem at the two-year college level.

In the earlier years, institutional success was largely viewed as increasing the percentage of the population who participated in some type of organized learning experience sponsored by a college. If however, success is to be defined as the percentage of population qualified for subsequent study or for employment as a result of completing an appropriate educational sequence, new success criteria must be developed; in particular evidence of student performance during and after the collegiate experience. Such performance becomes particularly problemmatic for students lacking basic skills

who, as a result, may be prevented from successful completion of programs necessary to compete for many career opportunities. Experience and time have shown that lack of proficiency in basic skills contributes to reduced opportunities regardless of whether a program has or has not been completed (Patterson-Griffith 1983, Brawer 1982).

Currently much rhetoric is devoted to program quality--a dimension extremely difficult to measure in any program. Previous priorities on greater access may, in fact, be at odds with the current emphasis on quality and excellence. In essence, community colleges have been the major instrument in delivering the access policy to citizens of the state and nation. The open door philosophy of educational service to a community resulted not only in an expansion of enrollment but also of function. Many institutions are now operating under expansion policies which seem to be out of synchronization with current concerns about student achievement and program quality. Knowledgeable observers indicate that public policy will continue to focus on student achievement rather than numbers of participants. Recognizing this, many colleges are beginning, or have already initiated, changes in policy areas to place more emphasis on development and assessment of academic skills and to require evidence of progress (Richardson 1982).

When considering more than mere access data, several issues emerge which are closely associated with assessment of programs or courses addressing academic skills whether viewed from a state, local or national perspective:

- lack of commonly accepted success indicators
- limited systematic collection of comprehensive evaluative data
- lack of identification of skill competency levels needed to succeed in career programs
- variance in relationships to occupational degree programs

- absence of discrete terminology used to designate these programs and courses

Developmental, remedial, basic and learning are some of the terms used to designate programs/courses designed to help students overcome skill deficiencies. Although often used interchangeably, the various terms may carry a connotation at any one institution that not only influences the evaluation process but also its status to degree programs. For example, remedial may be considered as limited to pre-college skills while developmental may be viewed as more comprehensive and inclusive of skills to be mastered concurrently with college content.

The lack of consistency of terms and specified meanings confound attempts to designate program criteria. Projected outcomes for a program with a remedial emphasis will differ markedly from outcomes anticipated for programs with a developmental focus.

A recent nation-wide study found that systematic procedures were not yet in place for collection of evaluation data for academic skill programs at colleges across the country. Assessment data collected were found to be limited to performance within the skill courses and did not include evidence of application in subsequent coursework (Rouche 1983).

A recent meta-analytic synthesis of evaluation studies of developmental/remedial efforts found negligible effects from community college programs. Resultant effects on student, GPA or persistence rates were undistinguishable from those of comparable students who were enrolled in regular programs. These findings were viewed from two perspectives: 1) because community colleges tend to serve nontraditional students uniquely, traditional yardsticks may not apply; 2) the developmental/remedial studies offered do not adequately prepare students for subsequent courses (Kulik et al. 1983).

Research studies also find that students who have desirable attributes related to an educational experience (such as higher pretest scores) gain more from that experience than students with more severe deficiencies. An Educational Opportunity National Survey confirms these increases of advantage, or viewed nagatively the gap, over time and level (Walberg and Tsai 1983, Callas 1982).

The two-year colleges in New York reflect these concerns of policies and practices found in current research literature. Staff members at New York State postsecondary institutions are posing similar questions to themselves. Many staff members find themselves in positions that demand conflicting actions: promote access but demand excellence, and perform both tasks with a shrinking fiscal base.

In the last few years, State Education academic program reviews have been working against granting degree credit for some developmental efforts subsequent to regulations from the Commissioner of Education regarding college level work. Recently the SUNY Office for Academic Programs, Policy and Planning has issued a draft policy concerning credit for college-level work.

The Vocational Education Act has recognized the need for developmental programs, and authorized funds to support such efforts. Many developmental/remedial programs in New York State two-year institutions have grown with VEA assistance toward enhancing the success potential of career students.

This research project, focusing on assessment of developmental programs in postsecondary education, was initiated during a period of concern and frustration, as many begin to recognize that the programs that evolved during the past 20 years were shaped by policies and priorities of previous decades. Thus interest and support for an organized state-wide effort to help clarify assessment policies and practices exists and continues to expand.

Overview of Intent

The project (Assessment of Effectiveness: Developmental Programs in Postsecondary Occupational Education VEA 53-83-0349), in cooperation with the Bureau of Grants Administration, was undertaken by the Two-Year College Development Center to investigate selected policies and practices associated with program assessment and evaluation. Project goals were:

- to determine the extent to which commonalities exist in success as defined for developmental/remedial programs in New York State two-year colleges
- to determine the extent to which data are available to assess the effectiveness of these programs
- to determine the flexibility of alternate methods for evaluating the effectiveness of these programs.

These basic research concerns are broader than a straight-forward query of how effective are developmental/remedial programs or "what is success." Program make-up and/or set of courses were summed as a basis for success criteria and commonalities. The delivery system, the topics addressed and the support provided are all fundamental to understanding program focus and assessment concerns. Given the range of diversity found in New York State programs, and to facilitate understanding and communication, no attempt was made to distinguish terminology. The terms (developmental, remedial, basic skills) were used in tandem and interchangeably to reflect similar usage by the colleges since, at this time, few attempt to make any distinction.

In terms of developing the perspective, the major research concerns are clarified as:

- To what extent have two-year colleges in New York State identified success criteria other than enrollment numbers/ access?
- What policies, plans, techniques or strategies are evolving to specifically address program quality and course effectiveness?

- Are the levels of student deficiency addressed in these assessments?

- To what extent are data available to address the following more specific questions?---

  -Can existing programs be described in terms of program components, entrance criteria, exit criteria?

  -How many occupational students are currently enrolled in developmental programs?

  -What proportion of students enrolled in these programs successfully complete them and go on to take regular career courses?

  -What is the average number of semesters students are involved with developmental instructional activities?

  -How do success rates of developmental and nondevelopmental students who have gone on to enroll in regular occupational programs compare?

  -What is estimated program cost per semester/academic year?

II. Summary of Methodology

Project methodology was approached in two phases. The first cycle involved a) selection of sample colleges with developmental/remedial programs in New York State two-year colleges, and b) on-site visitations, telephone consultations and mail surveys to collect in-depth data and information about their respective programs.

The second phase focused on surveying remedial/developmental programs at all two-year colleges in New York State offering occupational programs. The state-wide survey was designed to collect data relevant to the major research questions and issues that emerged from interaction with site liaisons, administrators and staff.

The initial activity was identification of seven college sites by project staff and Lawrence E. Gray, project liaison at the Bureau of Grants Administration. Criteria employed included size, geography, clientele served and program history. Nine campus sites at seven institutions (1 college with 3 campuses) were selected:

- Delhi Agricultural and Technical College
- Erie Community College (City, North & South Campuses)
- Kingsborough Community College
- Rockland Community College
- Schenectady County Community College
- Suffolk County Community College: (Western Campus)
- Tompkins-Cortland Community College

Mail and telephone contacts with each campus were initiated to secure cooperation and begin arrangements for the first round of on-site visitations to collect descriptive program data. As soon as contact person(s) were identified and willingness to cooperate verified by appropriate administrators,

an initial Site Questionnaire was mailed to designated liaisons. This instrument sought information regarding individual programs, general reactions to program success and identification of data systematically collected (Appendix A). Resulting data served as the basis for discussions during site visitations designed to detail program components, discuss local perspective of success, describe in-place assessment procedures, and identify data readily available as a result of on-going evaluations.

At a majority of sites, administrators as well as designated contact persons participated in discussions. It became evident during these sessions that sensitivity has been a stimulus for action such as seeking improvements or establishing a framework to better assess merits of the program. At others, sensitivity appears to manifest itself in an attitude of reluctance to discuss issues directly related to the quality question.

In addition to differences of actions, perspectives or attitudes, site visitations resulted in identification of differences in program components and make-up. Some differences were primarily structural format and procedural, others were more philosophical in nature with an accompanying variety of program objectives. Differences also existed regarding the extent to which program assessment is systematic and, therefore, availability of assessment data. The "power level" of the contact person emerged as a factor affecting data availability and extent of systematic procedures.

Commonalities were found in some basic program structures, and in widespread recognition of the range of issues surrounding developmental/remedial efforts.

The program at each site was summarized and outlined by identifying components, assessment procedures, success criteria, faculty and financial support. The draft summary was sent to the respective site with a follow-up

Site Response Sheet (Appendix B). This Response Sheet not only requested permission to share the summary and/or outline with the other eight site colleges, but also posed additional questions related to program success.

Based on site data, a three-page questionnaire was developed for a statewide survey. The questionnaire reflected information and concerns discussed with site colleges (Appendix C). After appropriate review by Bureau of Grants Administration and Information Center on Education - State Education Department, plus the Office of Institutional Research and Analysis - City University of New York the instrument was distributed by mail in late April, with a follow-up to non-respondents in early June.

During the spring semester, project staff discussed the project at the Association of Academic Deans and the Association of Student Affairs Officers. At each session, after purpose, procedures and emerging trends were summarized each group responded to an abbreviated questionnaire (Appendix D). Their shared perspectives served to enhance the scope of project information.

A second round of site visitations during the summer served to further discuss program success and evaluations planned or underway at each campus, to share site summaries and preliminary site data, and to identify continuing and future issues.

Data from all sources were tabulated and analyzed by frequency, percentage frequencies, means and comparative summaries.

III. Summary of Data Results

A total of 48 colleges that responded to the survey and/or participated as sites serve as data source for this project. Survey response rate was 79.6%. Survey and site data have been combined in this summary of results.

Program Profiles

In contrast to the findings of an earlier state-wide study[1], developmental/remedial efforts are viewed less as discrete "departments" than was the case during the middle 1970's. A separate segment of college offerings specifically defined as a developmental or remedial program has declined in frequency while courses based in departments have increased. In many cases a coordinator exists for Writing, Reading, (or English) and/or Math. The title of "coordinator" may also be linked to a learning center, a laboratory or other supportive activity. These learning centers are common and generally viewed as supportive or supplemental services. A faculty unit set apart from other academic departments with a specified coordinator of developmental studies for the total college, therefore, is becoming an exception rather than the rule.

Major program components are illustrated in Figure 1: 100% of the responding institutions offer writing, 98.5% reading, 95.6% mathematics, and 60.4% identify "other courses" within a developmental/remedial focus.

Several colleges identified study skills as part of remedial courses or learning center offerings. Other frequently noted courses dealt with personal psychology, career development, orientation to college or a specific career content area. In a few instances, these courses carried credit or college equivalent credit but the majority were non-credit. Formats included formal coursework, personalized study at learning centers, modules or variations of

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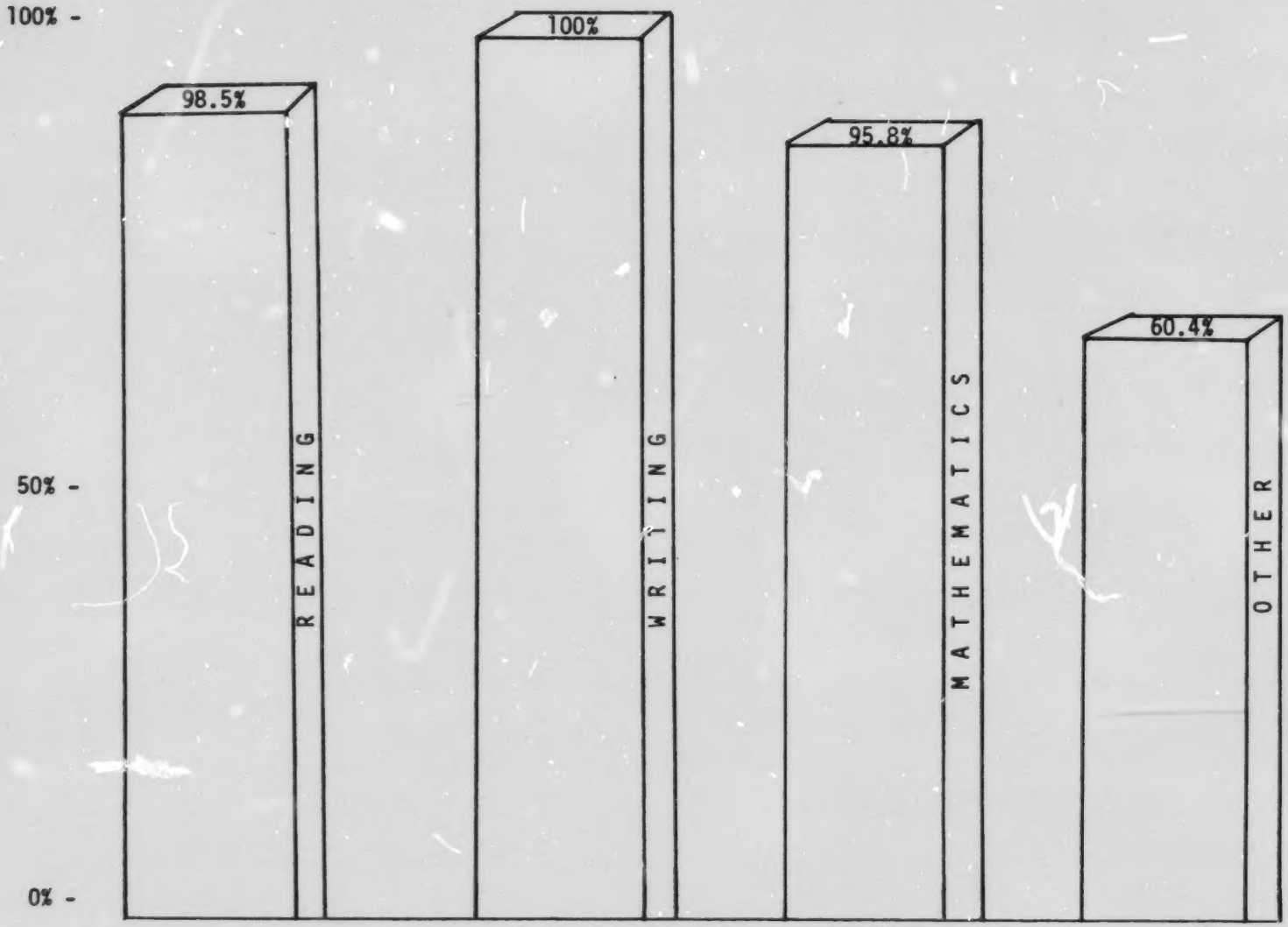
[1] Fadale, L. and Winter, G., Overview of Developmental Studies for Occupational Students: A Sourcebook for Postsecondary Programs. Cornell University, Ithaca 1976.

Figure 1: Frequency of Major Program Components



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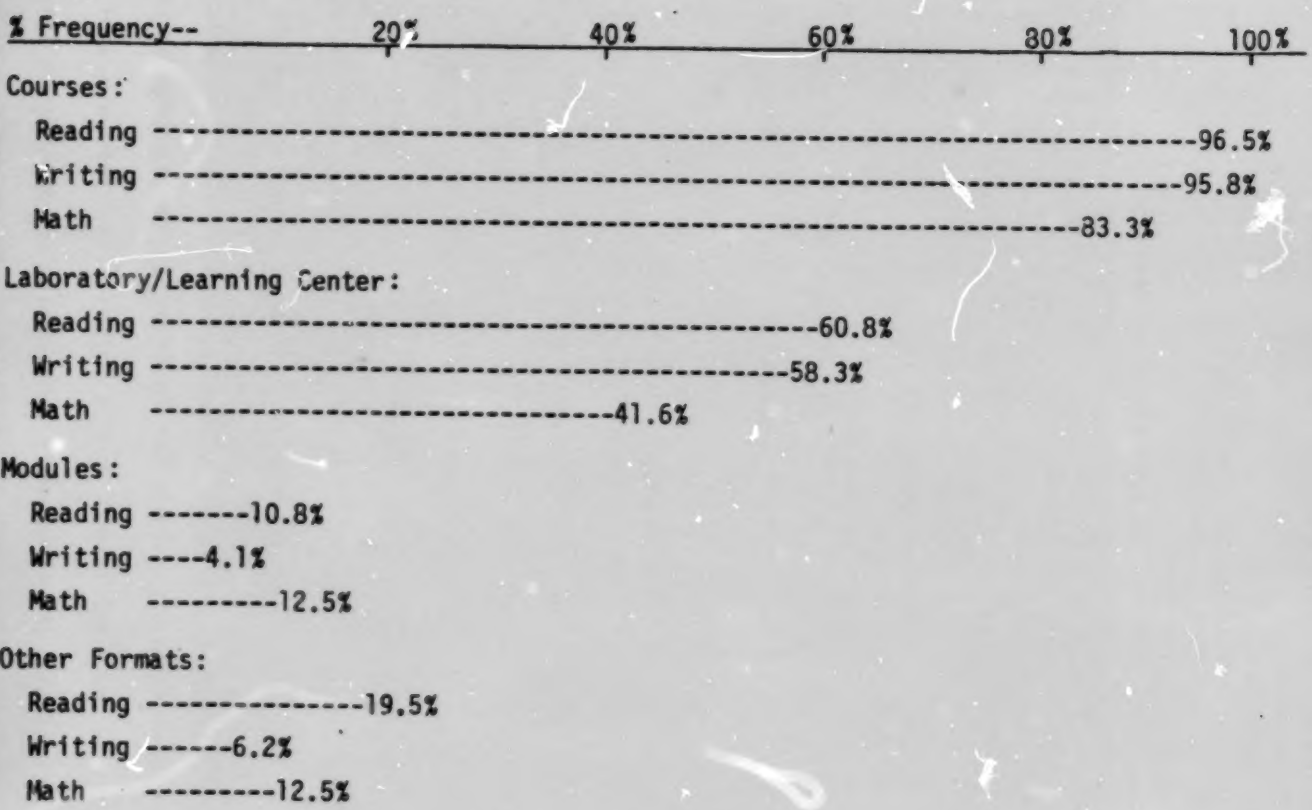
all three. The following titles were given as course offerings associated in some way with local developmental programs:

Achievement and Self
Achievement Motivation and Personal Growth
Adult Basic Ed. & High School Equivalency Program/P.A.C.E.
Applied Developmental Psychology
Business 101 Basic-Accounting
Career Exploration
Chemistry/biology/physics remedial courses
Careers Orientation
Career Planning
College Learning, Theory and Process
College and Self
College Seminar
College Survival Skills
Critical Thought Skills
English as a Second Language
Interdisciplinary Lab
Personal Growth and Development
Reading/study improvement in Science, Humanities and Social Science
Remedial courses specific to career area such as basic accounting
Social Science Skills
Study Skills
Study Skills and Advanced Study Skills
Techniques of Study for Science Skills

As summarized in Figure 2, instruction in reading is delivered through courses at 96.5% of responding institutions, writing at 95.8% and math at 83.3%. Learning laboratories/learning centers are part of the reading program component at 60.8% of the colleges, writing at 58.3% and math at 41.6%. The use of modules in reading is found in 10.8% of the programs, writing 4.1% and math 12.5%. Other formats were reported for reading by 19.5%, writing 6.2% and math 12.5%.

The primary delivery system for instruction to overcome basic skill deficiencies is the traditional course format. The laboratory or learning center serves to support coursework and provide an open-ended entry point and/or "comeback" once courses are completed. The small percentage indicating use of modules suggests that modules are incidental as an alternative to

Figure 2: Summary of Program Format by Skill Area



personalized drill or skills practice. Also the term module may carry an associated meaning that mitigates listing it as a program component.

Figure 3 summarizes the credit status of courses. Reading courses are reported as credit-bearing at 45.6% of responding colleges, non-credit at 41.3%, college equivalent credit at 4.3%, and in combination at 15.2%. In comparison, writing courses carry credit at 31.2% of the colleges, non-credit at 31.2%, college equivalent credit at 25% and in combination at 8.3%. Math resembles writing in that 33.3% of the colleges report credit, 39.5% non-credit, 22.9% college-equivalent and 16.6% in some combination. Dependent on impending policy, the status of credit may reach greater conformity in the near future.

The time frame of developmental/remedial courses vary among colleges as well as skill areas:*

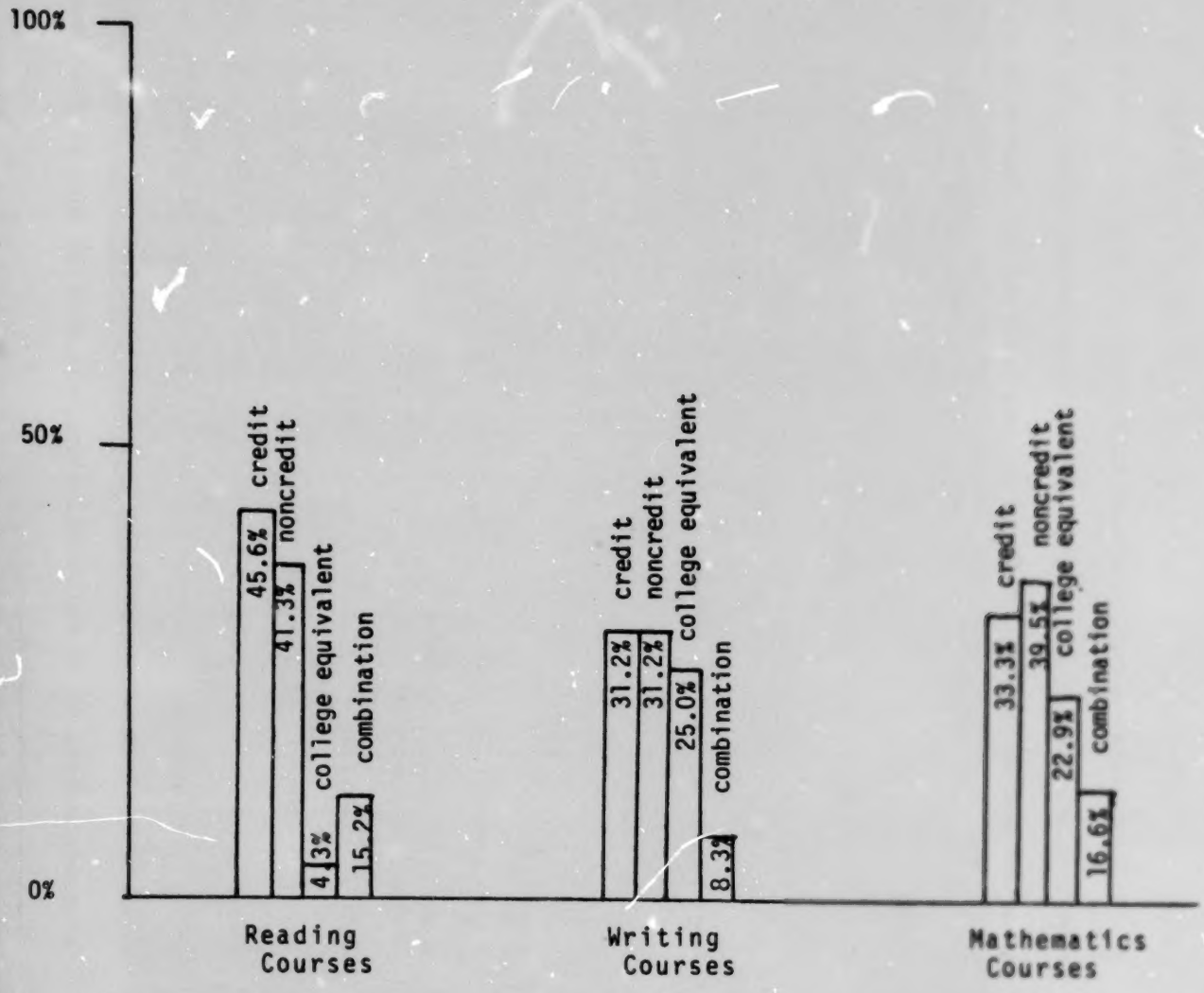
Time Frame for Remedial Courses:

	Math	Reading	Writing	Other Courses
one semester	60.8%	62.5%	77.7%	71.4%
two semesters	28.2%	27.5%	13.8%	21.4%
three semesters	6.5%	7.5%	2.7%	-
other: as many as needed, depends on placement	4.3%	2.5%	2.7%	7.1%

The most common time frame given is one semester for all skill areas. Two semesters in math, reading and other courses are available at approximately 25% of the colleges. Writing is available for a second semester at approximately 14% of the colleges. Three semesters are available in math and reading at approximately 6% of the institutions, but writing only at 3%. Several

*Percentages in this and subsequent figures may not equal 100% due to data omissions and/or multiple responses.

Figure 3: Summary of Credit Status by Skill Area



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respondents indicated that the length of time corresponds to student need or depends on initial placement.

Availability of supplemental services is shown in Figure 4: 81.2% of the responding colleges report tutoring assistance for developmental/remedial students, 60.4% counseling/targeted advisement and learning labs/learning centers.

Transitional courses, defined as entry or introductory level courses demanding limited reading or writing, which present initial content in a format that students with skill deficiencies can expect to perform effectively, are identified by 56%. Developmental/remedial students may enroll in these courses either simultaneously or subsequent to skill courses.

Skill reinforcement by content instructors is reported by 41.6% of the colleges. This recent phenomenon is gaining greater acceptance. Essentially career content instructors identify common skill errors made by students while attempting to meet course requirements. The instructor addresses these error patterns as part of on-going teaching activities.

Mediated materials are reported by 31.2% and computer-assisted instruction by 27.0%. Qualifying statements provided by respondents suggest the responses to these two items are open to interpretation. Some colleges report computer-assisted instruction and mediated materials as part of a laboratory setting. In these instances computer-assisted instruction may be an alternate technique for skill practice.

Other identified supplemental services include peer support groups by 20.8% of responding colleges and 8.3% a variety of specified activities.

As illustrated in Figure 5, 87.5% of the responding colleges report entrance criteria to be in place. These criteria include results of placement tests (56.2%), high school records (29.1%), or general aptitude tests

Figure 4: Frequency of Supplemental Services

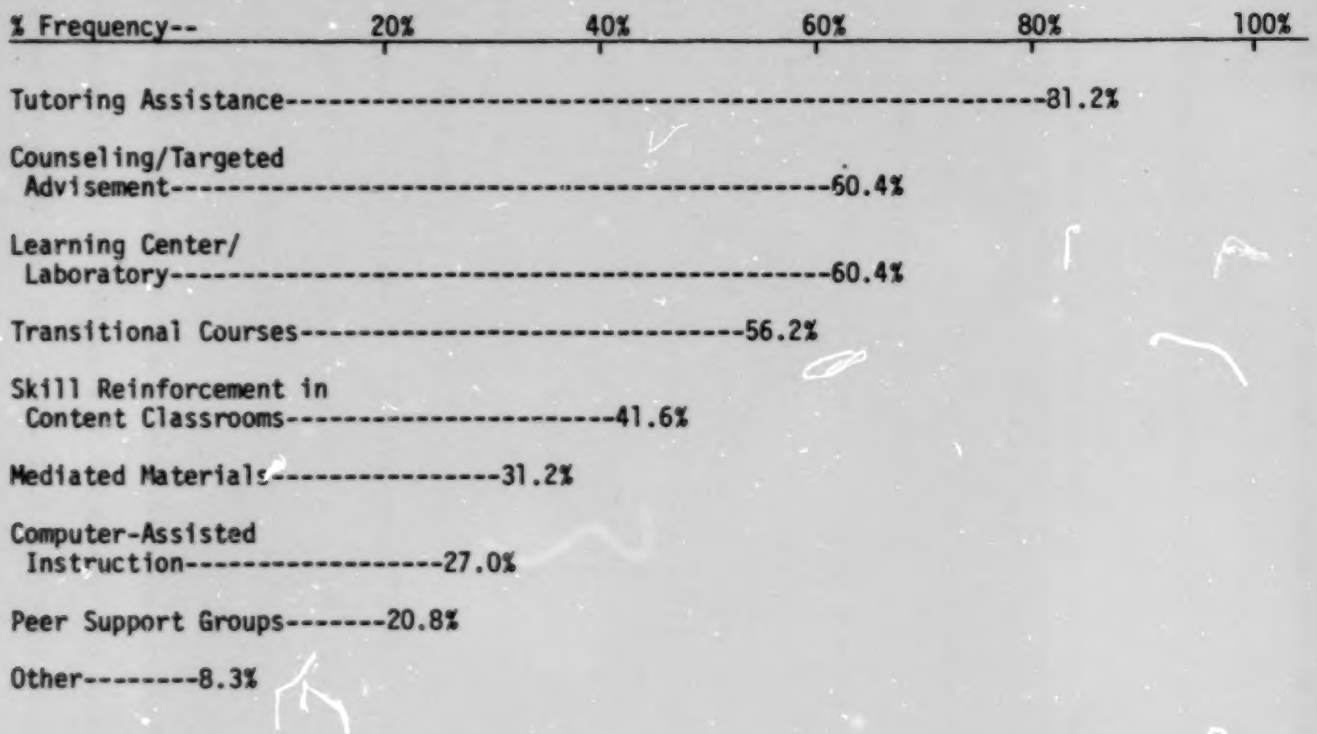
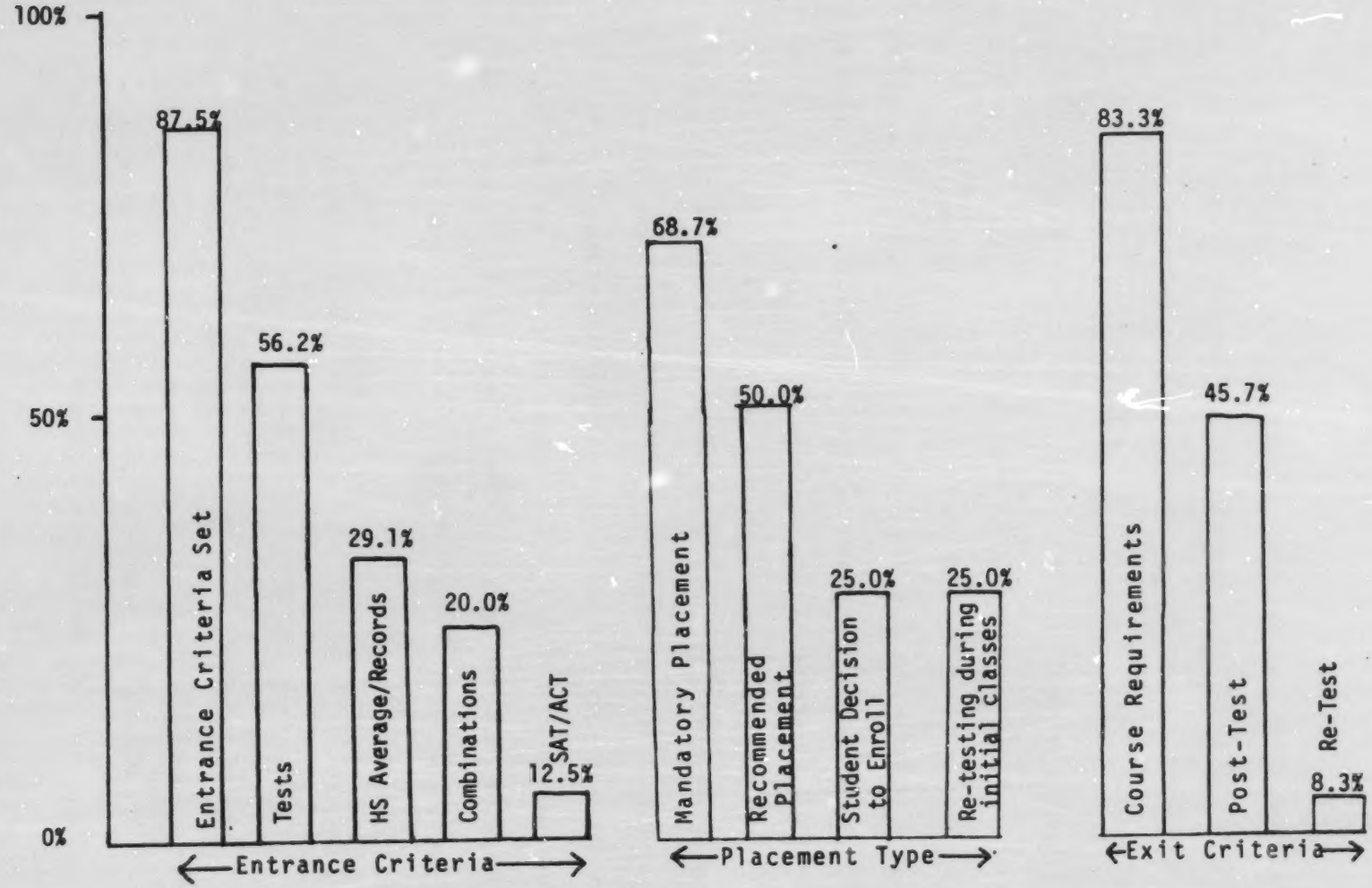


Figure 5: Frequency of Entrance, Exit and Placement Elements



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such as SAT or ACT (12.5%). Fifty percent of the programs report mandatory placement, 25% recommended placement, and 25% rely on student decisions for enrollment. Re-testing during initial class periods to verify original placement was specifically indicated by 25%. This percentage may be misleading since this technique is a generally practiced technique to verify placement decisions.

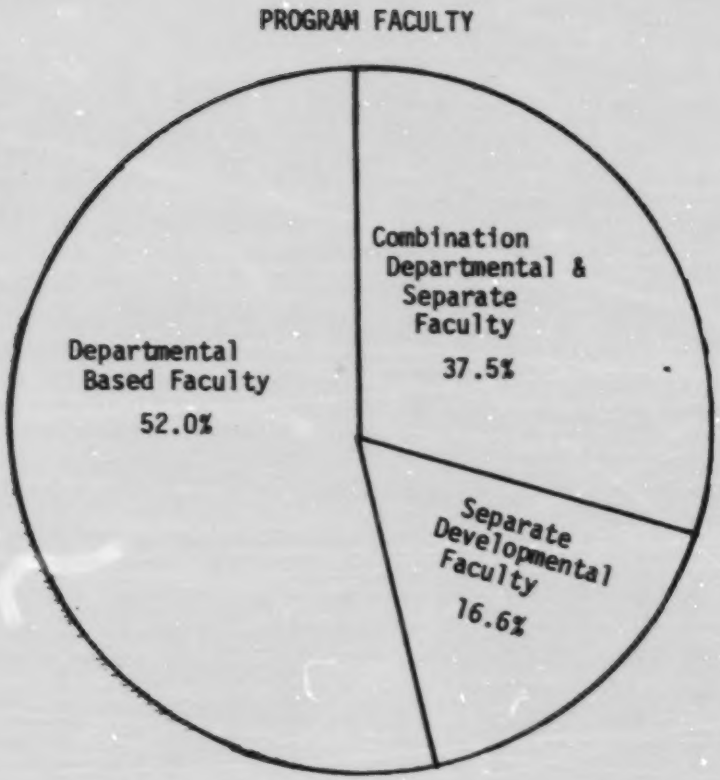
Of the responding colleges, 98% indicated that exit criteria exist, and 83.3% designate course requirements as exit criteria---if a student "passes the course" exit criteria are met. In 45.7% of the programs post-tests serve as exit criteria, 34.1% combine post-testing with course requirements, and 8.3% report retesting---re-administer a test to determine whether or not a previously identified deficiency has been overcome.

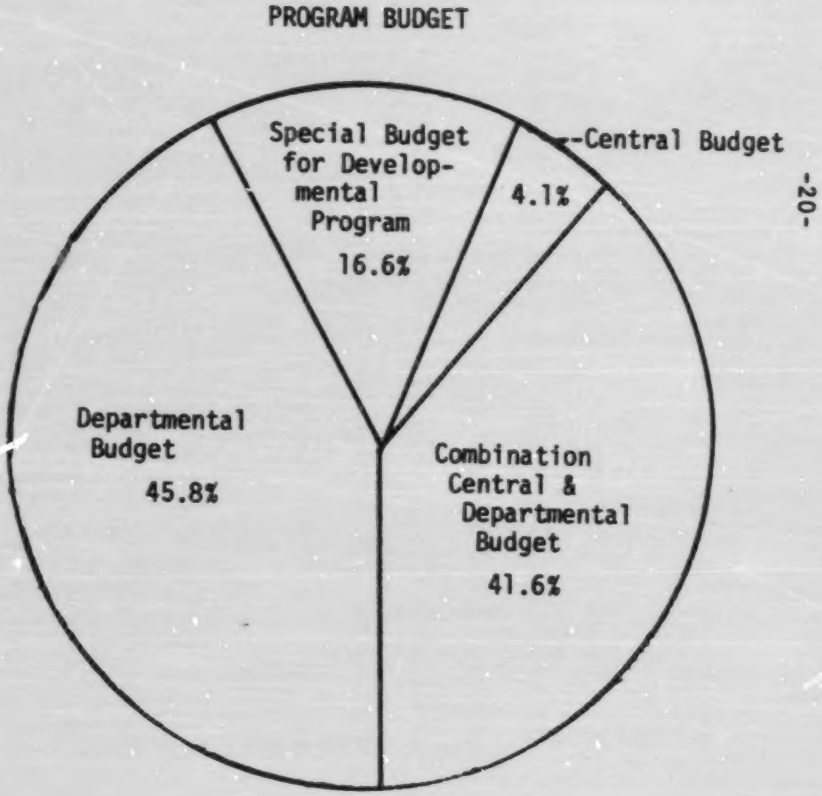
The apparent increase in existence of entrance/exit criteria and systematic testing for placement in New York State over the past five years compares favorably to the trend reported by Cross (1982). There appears to be more less hesitancy now than previously in requiring students to not only take tests, but also to follow-up and mandate required study. Establishing entrance and exit criteria may be a step toward determination of competence levels needed to succeed in career courses which has previously been noted as a critical lack (Brawer 1982).

As shown in Figure 6, faculty for developmental/remedial courses are based in departments at 52% of responding colleges, a combination of department-based and separate remedial faculty at 37.5%, and separate developmental/remedial faculty at 16.6%.

The budget for remedial/developmental courses is drawn from department budgets at 45.8% of the colleges, a combination of department and central

Figure 6: Source of Developmental Faculty and Budget





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Percentages may not equal 100 due to rounding and multiple responses.

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budget at 41.6%, a separate targeted budget at 16.6%, and the central budget at 4.1%.

Faculty and budget sources reflect the trend of developmental/remedial offerings to be based in departments. The percentage of colleges reporting separate budgets and discrete faculty for developmental programs compares favorably. Too, it may also reflect the perspective of developmental/remedial courses being a service function in much the same manner that counseling or placement are services to the college community---available for those students requiring it.

The Academic and Student Personnel Deans were asked to characterize respective developmental/remedial programs in terms of the major source of operational responsibility. Their responses regarding program structure reinforce data from coordinators/faculty (Figure 7). Operational responsibility for developmental/remedial programs is perceived by a majority (51.4%) to rest with the program co-ordinator/director, and in academic departments by 34.2%. The question did not ask the scope of coordinator responsibility, but based on program format information, it may be assumed that the majority of coordinators are linked to an academic department or skill area offering the courses.

The "Other" category under operational responsibility resulted in identification of Academic Deans, Dean of Student Affairs and Developmental Program Councils. The "Other" category relative to structure was devoted to comments specifying program formats.

Testing for Placement. The majority of entrance criteria are linked to placement testing. Instruments used by colleges range from locally developed instruments which establish cut-off scores and placement decisions based on faculty judgment to standardized instruments with specific grade levels,

Figure 7

Characterization of Developmental/Remedial Programs
by Academic and Student Personnel Deans

	Frequency: Academic Deans	Frequency: Student Personnel Officers	Total Percent Frequency
Structure			
A learning center for supplementary instruction	2	2	11.4%
A set of designated courses	8	7	42.8%
credit	5	4	25.7%
non-credit	2	2	11.4%
credit equivalent	-	-	2.8%
combination	1	-	
A learning center plus courses	7	9	45.7%
credit	6	3	25.7%
non-credit	-	1	2.8%
credit equivalent	-	1	2.8%
combination	1	4	14.3%
Skill reinforcement within regular class instruction	3	3	25.7%
Other	1	4	14.2%
Operational Responsibility			
Operational responsibility rests with academic department (s)	5	7	34.2%
Operational responsibility rests with a program co-ordinator/ director	8	10	51.4%
Other	2	4	17.1%

N = 35

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percentiles or deciles designated as indicators for placement at corresponding remediation levels.

Tests that were identified for reading, writing and math are listed with indicators of frequency of use and an array of sample cut-off scores:

Placement Tests Used:

Reading

Test	Frequency	Cut-Off Score
Nelson Denny	12	10.0
Stanford Diagnostic	5	34-38
California Achievement Test		40th percentile, 9 grade
Stanford Task II	3	40th percentile, 10 decile
CUNY Tests		30
Descriptive Tests of Language Skills		varies
Comparative Guidance, CEEB		20th percentile
SRA	2	
GPG Placement, ETS		10th percentile
Cloze		
CGP	1	percentile
URP		varies

Writing

Test	Frequency	Cut-Off Score
Local sample	19	faculty judgment
CUNY-WAT		8+
TSWE	3	35-39
CAT		40th percentile
CGP		
GPG		
McGraw-Hill Writing	2	63
Task II		10th percentile
College Board Written Expression		
Descriptive Tests Language Skills		

Math

Test	Frequency	Cut-Off Score
Local inhouse	17	faculty judgment
Descriptive Tests of Math Skills	4	18-23
CUNY (FSAT)	4	25
CAT	3	
Task		10th decile
CGP		
College Board Tests of Math	2	
GPG		
MAA		25th percentile
Stanford Diagnostic		
Occupational test		

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Identifying Priority Criteria and Program Success

As part of data collection, coordinators/staff from responding colleges were asked to describe major criteria used to indicate program success. Each was asked to identify, in order of priority, the top three criteria for their respective programs. Frequency of response and weighted priority scores are summed in Figure 8.

Over 70% identified successful completion of exit criteria for developmental/remedial courses as a major program criterion and about 40% a first priority. The second most frequently (50.5%) identified criterion was successful completion of the regular program course in sequence after the developmental course. About 25% chose this as a second level priority. The third most frequently (47.9%) identified criterion was completion or graduation from a career program, with about 30% selecting this as a third level priority.

Other frequently selected criteria included academic status/standing or grade point average at the conclusion of the first semester subsequent to completion of the developmental/remedial courses (33.3%), academic eligibility to continue in chosen program (27.1%), and achievement of goals held by individual students (25%).

When the priority is weighted (first = 4, second = 3, third = 2, checked = 1)*, scores correlate with percentage frequency with but one exception. Demonstrated increase in student motivation to achieve (#7) exchanges position with successful completion of career course requirements at a series of time points subsequent to remedial courses (#8).

The top three criteria are not affected by weighting scores but fall into a sequence of first, second and third levels. Program coordinators/staff can be expected to view the more immediate successful completion of course exit requirements as a primary or first level indicator.

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*Checked criteria were given a 1 weighting because of multiple responses and judgment of priority could not be made.

Figure 8

Summary and Priority of Success Criteria Selected
by Program Coordinators/Staff

Criteria	% Frequency Selection	Frequency of Priority Selection: 1	2	3	checked	Weighted Priority Score*
Successful completion of exit criteria for developmental/remedial courses.	70.8	18	6	7	3	107
Successful completion of the college level course immediately subsequent to the developmental course (such as college level English immediately after developmental writing).	50.0	4	11	6	3	62
Completion or graduation from career program.	47.9	6	2	12	3	57
Academic status/standing and/or grade point average at the conclusion of the first semester subsequent to completion of developmental/remedial courses.	33.3	2	9	3	2	43
Academic eligibility to continue in chosen program.	27.1	5	3	3	2	37
Achievement of the goal(s) held by individual students when enrolling.	25.0	4	3	2	3	32
Demonstrated increase in student's motivation to achieve.	20.8	1	3	4	2	23
Successful completion of career course requirements at a series of time points after completion of developmental/remediation courses.	18.7	3	3	1	2	25
A positive attitude towards self-directed learning and reading/writing for personal enjoyment.	18.7	2	1	2	4	19
Withdrawal at various points due to a conscious decision to terminate or change academic plans, even though academically eligible to continue.	8.3	0	1	1	2	7
Other: application of skills to content courses.	2.1	1	-	-	-	4

N = 48 colleges
*Priority 1 = 4
2 = 3
3 = 2
✓ = 1

The second level criterion is essentially the next step for students---enrollment in the next course in sequence. Examples may include: a composition course subsequent to remedial writing, or an introduction to accounting course following developmental math. This next course becomes a second level indicator of success.

The third level criterion is more long-term---the capability of students to successfully apply skills learned in remedial/developmental courses to career courses. Application of learned skills, which were once deficient, serve as indicators of competent performance in chosen career programs.

The question of priority criteria was also posed to two-year college academic officers. It was accurately hypothesized that the perspective of an administrator relative to program criteria might differ from those of faculty/coordinators who work directly with students, and as a result, program functions would be viewed from the broader total college perspective.

As illustrated in Figure 9, academic eligibility to continue in the chosen program was selected most frequently by academic deans (86.6%). Successful completion of the next regular courses was selected with second greatest frequency (73.3%). Two criteria were selected third most frequently---successful completion of exit criteria of courses, and achievement of goals held by individual students (40%). The student goals criterion recognizes that success of a program may be determined in terms of what was sought by the student when entering college. Weighting of priority ratings resulted in the same sequence as frequency of selection.

To obtain a third perspective, the same question was asked of two-year college student affairs officers at their spring session. Figure 10 summarizes their responses.

Academic eligibility to continue in chosen program was selected most

Figure 9

Summary of Priority Ratings for Criteria by
Two-Year College Chief Academic Officers

Criteria	% Frequency Selection	1	2	3	checked	Weighted Priority Score*
Academic eligibility to continue in chosen program.	86.6	4	4	4	1	37
Successful completion of the college level course immediately subsequent to the developmental course (such as college level English immediately after developmental writing).	73.3	4	5	2	0	35
Successful completion of exit criteria for developmental/remedial courses.	40.0	2	2	2	0	20
Achievement of the goal(s) held by individual students when enrolling.	40.0	3	0	2	1	17
Completion or graduation from career program.	26.6	0	1	3	0	9
Academic status/standing and/or completion of developmental/remedial courses.	13.3	1	0	1	0	6
Successful completion of career course requirements at a series of time points after completion of developmental/remediation courses.	13.3	0	1	0	1	4
Demonstrated increase in student's motivation to achieve.	13.3	1	0	0	0	4
Other: enter program of choice.	6.6	1	0	0	0	4
A positive attitude towards self-directed learning and reading/writing for personal enjoyment.	6.6	0	1	0	0	3
Withdrawal at various time points due to a conscious decision to terminate or change academic plans, even though academically eligible to continue.	6.6	0	0	1	0	2

N = 15

*Priority 1 = 4
2 = 3
3 = 2
✓ = 1

Figure 10

Summary and Priority of Success Criteria Selected by Two-Year College Student Personnel Officers

Criteria	% Frequency Selection	Frequency of Priority Selection: 1	2	3	checked	Weighted Priority Score *
Academic eligibility to continue in chosen program.	65	2	7	4	0	37
Successful completion of exit criteria for developmental/remedial courses.	60	6	2	4	0	33
Successful completion of the college level course immediately subsequent to the developmental course (such as college level English immediately after developmental writing).	40	3	3	2	0	25
Academic status-standing and/or grade point average at the conclusion of the first semester subsequent to completion of developmental/remedial courses.	35	3	2	2	0	22
Completion or graduation from career program.	35	3	1	3	0	21
Successful completion of career course requirements at a series of time points after completion of developmental/remediation courses.	20	1	2	1	1	13
Demonstrated increase in student's motivation to achieve.	20	0	1	2	1	8
Achievement of the goal(s) held by individual students when enrolling.	15	1	0	2	0	8
A positive attitude towards self-directed learning and reading/writing for personal enjoyment.	10	1	1	0	0	7
Other: passing grades in courses.	5	1	0	0	0	4
Withdrawal at various time points due to a conscious decision to terminate or change academic plans, even though academically eligible to continue.	5	0	1	0	0	3

N = 20

*Priority 1 = 4
2 = 3
3 = 2
✓ = 1

frequently (65%), followed by successful completion of exit criteria for developmental courses (60%) and successful completion of the next regular program course. When ratings were weighted the second criterion (successful completion of exit criteria for developmental courses) scored one point higher than the first criterion (academic eligibility to continue). The two criteria selected by 20%, show significant differences when ratings were weighted. The weighted score becomes five points less for increase in student motivation than successful completion of career course requirements at various time points.

A comparison of priorities selected by student affairs and academic officers indicates that student goals and motivation were chosen as priorities more often by academic deans.

Identifying the Existence of Systematically Collected Data

In the attempt to determine availability of systematically collected data 13 elements critical to program evaluation were identified. A three-fold question was asked:

- For which elements are data systematically collected?
- Of those elements without data for which should data ideally be collected?
- Which data elements are appropriate to the respective local program?

Figure 11 summarizes responses (and non-responses) by percentage frequency.

As indicated, information most frequently collected concerns the total number of students enrolled in developmental/remedial courses (83.3%). No response was given by 14.7%. This may suggest that the question was interpreted by some as the number of students enrolled in all developmental courses which might be beyond the immediate knowledge of the respondent. Because of flexibility and variety in time required to complete courses, the responses may suggest that any given number would change to the extent that a definitive

Figure 11
Summary Frequency: Status of Data Collection Relative to Designated Elements

Data Elements	Collected Systematically	Ideally Should Be Collected	N/A	No Response
1) Total number of students enrolled in developmental/remedial courses.	83.3%	2.0%	-	14.7%
2) The number or percentage of students who successfully meet exit criteria of the developmental/remedial courses.	62.5%	22.9%	4.1%	10.5%
3) A retention rate on a semester basis for students in remedial courses.	50.0%	35.4%	2.0%	12.6%
4) The number/percentage of students who complete the developmental/remedial requirements and enroll (subsequently or concurrently) in regular career courses.	45.8%	39.5%	6.2%	8.5%
5) Percentage of students who successfully meet your success criteria #1, 2, and 3 (identified in question C).	31.2%	45.8%	4.1%	18.9%
6) The effectiveness of supplementary assistance (such as tutoring, peer tutoring, professional tutoring, voluntary laboratory sessions, mediated materials, etc.).	31.2%	39.5%	10.4%	18.9%
7) Number of occupational students enrolled in developmental/remedial courses and program.	29.1%	18.7%	31.2%	31.0%
8) The extent to which entrance and exit criteria requirements are clearly communicated to students.	27.0%	39.5%	12.5%	21.0%
9) The extent to which enrollment procedures are clearly communicated to the college community.	27.0%	31.2%	16.6%	25.2%
10) The number/percentage of students who meet remedial exit requirements and then successfully complete careet programs.	22.9%	47.9%	8.3%	20.9%
11) The number/percentage of career students completing developmental requirements and go on to successfully complete the first sequence of college level courses.	22.9%	50.0%	12.5%	14.6%
12) A GPA comparison of students completing remedial requirements as compared to students of matched ability who did not enroll in remedial courses; and both groups now enrolled in career programs.	18.7%	52.0%	16.6%	12.7%
13) The comparable costs per student or contact hour for remedial/developmental and for nondevelopmental students.	16.6%	41.6%	18.7%	23.1%
14) An average time period needed by a majority of students to eliminate skill deficiencies.	12.5%	58.3%	12.5%	16.7%
15) The reasons for nonpersistence in light of student goals.	6.2%	58.3%	12.5%	23.0%

N = 48 Colleges

answer becomes meaningless except for a narrow time period.

Data pertaining to the percentage of students who successfully meet exit criteria of developmental courses is collected by 62.5%; and an additional 22.9% feel these data should be collected.

Approximately 50% systematically collect retention rates on a semester basis for students in developmental/remedial courses; and more long-term data is collected by 45%---the number/percentage of students completing developmental/remedial requirements who are subsequently or concurrently enrolled in career content courses. Thus an awareness of student performance on an aggregate basis per semester in both remedial/developmental courses and the next regular course can be anticipated at approximately half of the colleges.

The actual number of occupational students enrolled in developmental/remedial courses is collected by 29.1% of the respondents, 18.7% indicate this as ideal data. Over 31% did not respond, and 31.2% indicate the element not to be appropriate to their program. Many two-year college programs received start-up or initial funding from Vocational Education funds. The rationale, to enhance the potential of student success in career programs, holds firm and is being accomplished by many programs. The identification of student programs, selected concurrently or in the future, becomes a lesser concern than student performance. Often data relative to program choice is housed in a research or administrative office. Unless instructors/coordinators make a concerted effort to obtain such information or program structure demands it, staff may well remain unaware of program areas.

Based on these data, if one were to enter a classroom with a developmental/remedial course, one could expect to find, in six out of every ten classrooms, data available about the total number of students enrolled and the number/percentage of students meeting exit criteria of the course. In four out of

every ten classrooms, retention rate by semester and the number/percentage of students who complete developmental/remedial requirements and enroll in regular career courses would be available. In three out of ten classrooms, data regarding percentage of students who meet success criteria and effectiveness of supplementary assistance would be available.

Four data elements were identified by over 50% of respondents as information that ideally should be collected:

- -the number/percentage of career students who complete remedial requirements and successfully complete the first sequence of college level courses
- -a grade point average comparison in career courses of students completing remedial requirements as compared to students of comparable ability who did not
- -the average time period needed by a majority of students to eliminate skill deficiencies
- -the reasons for non-persistence in light of student goals

The statistics required by many of the data elements are seemingly simple to acquire. However, this study indicates that discrete developmental programs with a general coordinator are less frequent than departmental coordinators who often assume the role along with teaching duties for not only remedial but regular degree courses. Collection of even the simplest data with a degree of comprehensiveness requires that an individual have the commitment and the time to actually perform the needed tasks. In cases of an "outside" motivation; (such as this project, local review, administrative policy) greater emphasis is given to data collection activities. These activities are further tempered by a sense that "some data exist in an administrative or research office" when necessary to know. It is highly probable that the proportion of developmental programs that actually collect data compares favorable to any regular degree or career program.

As a result of this project asking the questions, unsolicited comments

indicate that colleges are considering and planning to undertake more systematic approaches for collection of data pertinent to their developmental/remedial courses and programs. Often the plans are pinned to availability of computer assistance, to availability of college resources to help access pertinent information that may already be collected, and to resources to collect additional data critical to evaluation of developmental programs.

Identifying Program Cost

The question of cost in relation to developmental/remedial programs is an area of extreme sensitivity, and often not considered an appropriate topic for discussion beyond local staff. There was general reluctance to address dollar cost specific to developmental/remedial courses or distinct programs. The general perspective contends that developmental/remedial efforts, regardless of basic structure, function as a service to students. As such they become a college expenditure to insure that such offerings can adjust and change as clientele needs adjust and change. Too, there is a sense that unless every course (such as English, technologies, nursing, or any career area) is required to specify costs, developmental/remedial courses should not be expected to respond uniquely to expenditure questions.

Selected information was shared with the understanding that it be used as a basis for constructing a general indicator based on aggregate data and information available from other public resources, such as the SUNY Institutional Research Office. Based on these sources, a summary cost outline is presented in Figure 12.

Regardless of basic program structure, a specific developmental program or a set of department-based courses, one individual assumes the role of coordinator. The coordinator may be responsible for the total program, for courses from a specific department, for a learning center, or for supplemental

Figure 12

ESTIMATED COST OUTLINE

A. Staff Title(s)	Rank/Level of Staff Titles	% of Time Devoted by Staff Title	Average Salary of Staff Title(s)*
Coordinator (program, courses, learning center and/or supplemental services)	Professor/ Associate Professor	50-100%	$32,700, $27,600
Instructors	Assistant/ Associate Professor	50-100%	$27,600, $22,900
	Technical Specialists	20-100%	$15,150
	Adjunct Staff	10-20%	$1,500 per course
Assistants	Paraprofessionals	10-50%	$4.00 per hour
Clerical Support	Secretary	25-100%	$9,500

B. Average # of Students Served Per Academic Yr	Amount of Credit per Program/Courses	Amount of Credit/ Equivalent per Program/Courses	Average Amount Expended Annually per Student for Items such as Supplies
150-3,000	3-12 credit hrs	3-25 credit/ equivalent hrs	$4.50-$25.00

*Office of Institutional Research and Analytical Studies, State University of New York, 1979. (Mean 1979 salaries adjusted upwards 20%.)

services provided as part of the developmental/remedial effort. In many cases a coordinator carries the rank of professor or associate professor.

A second staff role is that of instruction. Instructors, usually carry a professional rank of assistant or associate professor. In addition, technical specialists may assume a targeted role in the program such as to aid or support the instructional process with a specific technique. Other assistants are usually categorized as adjunct staff or para-professionals depending on the particular program.

Clerical support is provided as a distinct position or as a shared position among academic departments.

The range of time devoted by each staff title to the program plus average

salary for that title are summed in Figure 12.

Usually, if developmental courses are identified as distinct programs, a budget allocation for such items as supplies, telephone, postage, instructional supplies and travel exists. The more common occurrence, courses based in departments, have no separate budget allocations. The expenditures are categorized as a general institutional expense or, in some instances, as part of a departmental expense, a specific dean's budget or some combination thereof.

The number of students served in an academic year is highly dependent upon the size of the college and the major characteristics of its student clientele.

There are no commonalities as to the status of credit. In some instances, college credit is given for selected courses within certain degree programs. In others, college equivalent or no credit may be given for selected courses. In other cases, there is some combination.

The average amount expended for supplies per student in developmental/remedial courses is reported from $4.50 through $25.00. This amount is dependent upon the type and focus of program, plus the number served and clientele characteristics.

Usually recruitment, admissions and placement activities are borne by the college and are not calculated as a direct expense to ary one program budget. The exceptions are cost of placement tests and any temporary staff needed to help with the testing process. This becomes a mute point except in the instances where a separate budget exists for a developmental program. Otherwise, these expenses are attributed to a central budget, a general operating or departmental expenditure.

IV. Discussion of Data Results

Priority Criteria as Compared to Program Profiles

Selected developmental program characteristics are profiled by selection of the three top priority criteria. The first level priority criterion, successful completion of exit criteria for developmental/remedial courses, suggests immediate indication of progress at direct student-faculty relationship. The second level priority criterion, successful completion of the next regular program course, indicates the degree to which learning that took place in a developmental/remedial course facilitates application of skills to regular coursework. The third level priority is more long-term, completion or graduation from the career program; and suggests a melding with institutional mission and over-all college success criteria. As noted, administrators placed greater priority on the broader long-term criterion than faculty.

To compile the program profile, selected characteristics of all developmental/remedial efforts choosing one or more of the three priority criteria were summarized by entrance and exit criteria, and placement policies and procedures. Other characteristics, such as skill areas taught, were not included because of universal similarities among all programs. A significant majority choosing one or more of these criteria employ placement testing, mandate placement, and have established entrance and exit criteria. (See Attachment I for profile detail).

Matching Selection of Program Criteria by Institutions

Although the three priority criteria were most frequently selected, the attempt to identify on a college-to-college basis, institutions choosing all three priorities resulted in but one triad of institutions. Six additional sets of two colleges did agree on three criteria. Two of the criteria were

priority items but the third varied. The matchings are summarized in Figure 13.

As illustrated, the three priority criteria were found in five of the seven matching triads (72%). A fourth criterion, academic status/standing grade point average at the conclusion of the first semester subsequent to completion of developmental/remedial courses, was identified in three of the seven matching triads (43%).

Matching was more frequent on two criteria, which were not necessarily from the priority three, and a third differing from college to college. This approach to analyses of these data did not result in significant relationships. The detail is presented in Attachment II.

Comparison of Priority Criteria and Data Elements Collected

The programs which selected one or more of the three major criteria tended to collect similar data systematically. (See Attachment III). Of those identifying one or more of the priority criteria, over 50% collected: the total number of students enrolled in developmental/remedial courses, the number/percentage of developmental students who successfully meet exit criteria, the number/percentage of students who complete developmental/remedial requirements and enroll in regular career courses, and the retention rate on a semester basis for students in remedial courses. Two other data elements are collected by 50% of respondents selecting the first or second criteria: number/percentage of career students completing developmental requirements plus the next regular course, and the percentage of students who successfully meet local success criteria. The number of occupational students enrolled in developmental/remedial courses is collected by 50% or more of programs selecting priority criteria two and three. Reasons for non-persistence in light of student goals and effectiveness of supplementary assistance are collected by over 50% of those selecting the third priority criterion.

Figure 13

Matching Selections of Three Major Program Criteria

3 colleges -	b:	Completion/graduation from career program.
	f:	Successful completion of exit criteria for developmental/remedial courses.
	d:	Successful completion of the college level course immediately subsequent to the developmental course (such as college level English immediately after developmental writing).
2 colleges -	i:	Achievement of the goal(s) held by individual students when enrolling.
	d:	Successful completion of the college level course immediately subsequent to the developmental course (such as college level English immediately after developmental writing).
	b:	Completion/graduation from career program.
2 colleges -	f:	Successful completion of exit criteria for developmental/remedial courses.
	d:	Successful completion of the college level course immediately subsequent to the developmental course (such as college level English immediately after developmental writing).
	j:	Demonstrated increase in student's motivation to achieve.
2 colleges -	f:	Successful completion of exit criteria for developmental/remedial courses.
	c:	Academic status/standing and/or grade point average at the conclusion of the first semester subsequent to completion of developmental/remedial courses.
	b:	Completion/graduation from career program.
2 colleges -	f:	Successful completion of exit criteria for developmental/remedial courses.
	d:	Successful completion of the college level course immediately subsequent to the developmental course (such as college level English immediately after developmental writing).
	c:	Academic status/standing and/or grade point average at the conclusion of the first semester subsequent to completion developmental/remedial courses.
2 colleges -	d:	Successful completion of the college level course immediately subsequent to the developmental course (such as college level English immediately after developmental writing).
	c:	Academic status/standing and/or grade point average at the conclusion of the first semester subsequent to completion to developmental/remedial courses.
	b:	Completion/graduation from career program.
2 colleges -	f:	Successful completion of exit criteria for developmental/remedial courses.
	h:	Academic eligibility to continue in chosen program.
	b:	Completion/graduation from career program.

Frequency sum of criteria per 2 or more triads--

b, f, d in 5 of 7 matching triads - 72%

c in 3 of 7 matching triads - 43%

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Comparison of Program Components by Type of Institution

Program constructs were examined in relation to the four types of institutions (Agricultural and Technical, SUNY Community Colleges, CUNY Community Colleges, Independent Colleges) to determine differences and similarities. The basis of these data were responses of colleges within the institutional categories.

SUNY Community colleges made up the largest number of respondents---32 individual colleges. The 10 smallest and 10 largest colleges were identified. Medium-sized colleges were dropped to help determine whether college size resulted in significant program differences. Selection of college size was based on ranking of size as specified by the SUNY Office of Institutional Research.[1]

As illustrated in Figure 14a, CUNY two-year colleges show relative consistency with entrance criteria and placement. Exit criteria, source of instructors and budget suggest some variation as responses show combinations related to instructor source, exit criteria used and source of budget.

The smaller community colleges demonstrated a range in types of entrance criteria, placement status (mandatory, recommended or combined) and exit criteria. A majority do look to course requirements as exit criteria. Instructors are based in department or in some combination of departments and specialized faculty. Budgets are centralized, departmental, or in some combination.

The larger SUNY community colleges appear to use tests as entrance criteria more than the smaller institutions. Although not a majority, larger colleges also tend to use mandatory placement more than smaller colleges. Larger

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[1]Office of Institutional Research and Analytical Studies, State University of New York, 1979.

Figure 14a

Summary of Program Components As Related to Institution Type

	Entrance Criteria		Placement			Exit Criteria				Instructors			Budget			
	Tests	HS Records	Man	Rec	Comb	CoReq	Posttest	Retest	Comb	Rem	Dept	Comb	Spec	Cent	Dept	Comb
Agricultural/Technical Colleges (N=5)	40%	40%	40%	40%	20%	40%	20%	-	40%	-	40%	40%	-	-	20%	80%
SUNY Community Colleges:																
Small (N=10)	40%	50%	10%	40%	50%	60%	20%	20%	-	-	50%	50%	-	30%	50%	20%
Larger (N=10)	70%	10%	40%	30%	20%	70%	-	-	20%	10%	60%	30%	10%	-	80%	10%
CUNY Two-Year Colleges (N=7)	100%	-	100%	-	-	83%	17%	-	-	-	33%	67%	-	-	83%	17%
Independent Colleges (N=5)	80%	-	60%	20%	20%	100%	-	-	-	-	20%	60%	20%	-	-	60%	40%

Total N = 37 colleges

Figure 14b

Summary of Supplemental Services by Institutional Type

	Reinforce across Programs	Transitional Courses	Learning Center/Lab	Mediated Materials	Tutoring	CAI	Counseling/ Advise	Peer Support Groups
Agricultural/Technical Colleges (N=5)	40%	80%	60%	60%	80%	-	60%	-
SUNY Community Colleges								
Smaller (N=10)	50%	80%	60%	30%	80%	30%	40%	20%
Larger (N=10)	70%	40%	40%	30%	70%	10%	60%	10%
CUNY Two-Year Colleges (N=7)	58%	43%	58%	29%	100%	58%	58%	43%
Independent Colleges (N=5)	60%	40%	50%	40%	50%	40%	60%	-

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colleges view exit criteria mainly as meeting course requirements. Instructors are generally based in departments although a few respondents indicated some combination of specialized and departmental staff. The budget source was primarily from departments.

Responding independent colleges were few in number but the majority of those that did respond use tests as entrance criteria, have mandatory placement, use course requirements as exit criteria, and draw from departments for instructors and budget.

Regardless of category, whether Agricultural and Technical, SUNY Community College, CUNY Community College or Independent, the large majority offer reading, writing and math skill instruction. In some instances, reading and writing are in some combination but remain identifiable as separate entities. In a few instances, math may not be as readily identified as a course as reading or writing, but is offered in some format by a large majority (over 95%) of all colleges. Because of commonalities program components were not specified further. The supplemental or supportive services offered as part of developmental programs are specified in terms of institutional type in Figure 14b.

Tutoring is offered by at least 50% of all colleges in each category, 100% by CUNY colleges, 80% by the smaller community colleges and Ag and Techs. and 70 percent of the larger colleges. Tutoring, therefore, is a popular supplemental service to developmental/remedial programs across all institutional types.

In contrast to five years ago, an usually high percentage of institutions report reinforcment of basic skills in career curricula. Larger SUNY Community Colleges indicate this reinforcement is taking place more than other institution types. Independent Colleges compare favorably at 60%. The Ag and Techs at 40% show the least activity in this area.

Transitional courses are offered by 80% of small SUNY colleges and Ag and Techs. A learning center or lab makes up part of the offerings at 50% or more of the programs in each of the institutional categories.

No Ag and Tech reported any work with computer-assisted instruction in developmental/remedial courses. Thirty percent of the smaller community colleges, compared to 10% of the larger community colleges indicate some remedial instruction with computers. Forty percent of the independent colleges and 58% of the CUNY colleges also report the use of computers. In several instances respondents indicated this to be an area in which plans were underway for the upcoming year.

Counseling/advisement was reported by a majority of all institutional types with the exception of smaller community colleges at 40%. Peer support groups are not particularly prevalent except as reported by 43% of the CUNY two-year colleges.

The item dealing with mediated materials was rather confusing to the respondents. In some instances a note was written as explanation. Thus any interpretation of this item need be with caution.

Thus although courses are the most common delivery format, a range of services provide variety in educational experiences to accommodate a range of differences in learning styles.

Comparison of Selected Priority Criteria by Institutional Type

In examining selection of priority criteria selected by institutional categories, the ten larger community colleges did not consistently provide complete responses. In instances where no basis for judgment as to priority existed, responses were omitted. Figure 15 serves to illustrate the clustering of criteria as selected by institutional type. Besides providing a pictorial clustering of priority criteria, differences among institutional

Figure 15: Clustering of Program Criteria by College Type

	Withdrawal even though academically eligible			Completion/graduation from career program			Academic status/standing/ GPA at end of first semester after completion of remedial courses			Successful completion of college level course subsequent to developmental course			Successful completion of career course requirements after completion of dev/ remedial courses			Successful completion of exit criteria for dev/rem courses			Positive attitude toward self-directed learning & reading/writing for enjoyment			Academic eligibility to continue in chosen program			Achievement of goal(s) held when enrolling			Increase in student's motivation to achieve		
	Priority			Priority			Priority			Priority			Priority			Priority			Priority			Priority			Priority			Priority		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Agricultural/Technical Colleges (N=5)						**		*	*	*		*					*					**								
SUNY Community Colleges: Small Community Colleges (N=10)						**	*	**		*			*			** **	**		*			*	*		*					**
Large Community Colleges (N=10)				*		**	*		*		**	*	*				**							*	*					
CUNY Two-Year Colleges (N=7)				*		** *		*		*	** **					**		*						*				*		*
Independent Colleges (N=5)			*			**		*			*	*				*	*		*			*	*						*	

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categories are shown. For example, smaller community colleges tend to select a variety of second and third level criteria. Independent colleges tend to select a range of criteria. Relative consistency of choice is shown by the CUNY colleges.

Comparison of Collected Data Elements by Institutional Type

All colleges responding to the state-wide survey* were categorized into SUNY Community Colleges, Agricultural and Technical Colleges, the CUNY Two-Year Colleges and the Independent Colleges relative to data systematically collected. The question dealing with data elements and the extent to which these elements are systematically collected served to provide indicators of on-going assessment practices, as subsequently summed.

Number of data elements systematically collected:

Type of College	Ave. Freq.	Range of Freq.	Variance from Total Average
Community College, SUNY (N=24)	4.9	1-12	- .3
Ag & Tech, SUNY (N=4)	4.8	1-8	- .4
CUNY Two-Year Colleges (N=6)	6.3	2-12	+1.1
Independent Colleges (N=5)	5.6	2-7	+ .4
Overall Average	5.2	1.5-9.8	

N=39 colleges

Twenty-four (24) SUNY Community Colleges averaged 4.9 data elements systematically collected. This compares to 4.8 by Ag and Techs, 6.3 by CUNY Two-Year Colleges, 5.6 by Independent Colleges. The reader should be aware that the number of SUNY Community Colleges is several times that of colleges in the other three categories. When comparing the 10 larger and smaller community colleges, the larger institutions average 4.6 data elements, the smaller 6.1 elements.

*Because of variation in specific items, site data were excluded from this summary.

Interpretation should also acknowledge range of frequency reported. Of the smaller two-year colleges one reported 12 items and another 11. If these two reports are excluded, the average number of data elements systematically collected by the smaller two-year colleges is reduced to 3.8. The Ag & Techs show a range of one through eight elements and an average of 4.8 which compares favorably to the total average of the two-year colleges. The variance for SUNY Community Colleges, regardless of size, and Ag & Techs is less than .5.

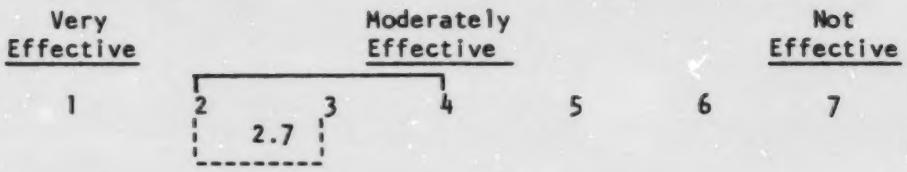
The CUNY two-year colleges also have a broad range of 2 to 12 reported elements. Because of their smaller number (6), excluding the maximum reported (12), reduces the average number of data elements to 5.2. With all six CUNY colleges included, the average variance from the total average is + 1.1. In many cases, respondents from CUNY colleges were multiple. Because their programs are organized with separate coordinators for reading, math and writing, each of the three were contacted. In the majority of instances, more than one responded. Therefore, responses for each college are mean perceptions of more than one individual. Because there was no basis on which to make a judgment of which response to select, all responses were included.

The independent colleges show more consistency in their range of data elements collected. Variance from the total average compares to the Ag & Tech and SUNY colleges at .4.

V. Rating Program Effectiveness

In the attempt to obtain an initial standard of success, contact persons at each site were asked to rate the effectiveness of their local programs/courses and to identify the basis of that rating. As shown below, the average rating on a seven-point scale (1 = very effective, 7 = not effective) was 2.7, between very and moderately effective. The ratings ranged from a high of 2 to a low of 4.

Effectiveness rating of remedial/developmental programs:



Average rating: 2.7
Rating range: 2-4
N = 8 site colleges

Perhaps more informative than the rating itself were the described sources of ratings, which included the following:

- the performance of students in regular courses
- the comparison of GPA of students who had been in developmental courses versus non-developmental students one year into their program
- the extent of success in college careers
- performance in the degree credit program
- success or performance in the next subsequent course after the developmental work
- student feedback
- demonstrated skills of the students in their regular coursework

- assessment and documentation from English and math departments relative to regular coursework
- the extent of retention
- the career success that students experience.

The basis of ratings reflect the priority criteria selected for overall success. Too, they imply that each institution chooses success indicators which reflect the clientele served, the needs of the college, and the mission or overall policy that is promoted and supported by the college, its administration and governance body.

The range of factors underlying these success ratings also point to the difficulty of identifying a college-wide standard. Therefore, attempts at establishing standards for developmental/remedial programs is often viewed as having no basis, rather a felt perception that "we must do the best we can and keep doing it better."

Developmental remedial staff generally sense that the extent of program success is correlated to the level of student capability or degree of deficiency. For example, the level of student skills at Ag & Techs can be expected to differ considerably from those at a community college. The Ag & Techs are not "open admissions" institutions, are residential, and thus have more opportunities to "select" students with minimal deficiencies in comparison to community colleges with open access policies. Students entering community colleges vary in severity of deficiencies from lacking a high school diploma or an overall literacy well below high school levels to lack of a few identifiable skills needed for effective, functioning in regular degree courses. Thus, the structure of the college is also a variable which impacts program success or standards of success.

CUNY colleges tend to address remedial needs with policies consistent

across all institutions, and as a result, have established a general structure within which each college functions. Even with this structure differences exist in student clientele and in perceptions of success which impact anticipated program outcomes.

CUNY two-year colleges, as well as larger urban community colleges, face the issue of English literacy. In some instances the problem is more than English literacy but literacy per se in any language. Major questions arise in the attempt to determine a standard of success: How far can these students realistically advance? What are student expectations? What can realistically be achieved within the timeframe of a community college given current resources and policies?

The identification of success standards and the extent to which a common definition of success can be established and within what constraints demand further study. Commonalities of program components and priority criteria have been identified with general consensus. Plans for more systematic collection by individual programs are increasing which may suggest a growing awareness of the critical nature of program assessment as linked to success criteria and standards, or an increase of pressures for more detailed or comprehensive evaluations.

VI. Concluding Summary & Implications

Summary of Findings

The major concerns of this research effort were identified as determining the extent to which:

- New York State two-year colleges have identified success criteria other than enrollment numbers/access
- policies or actions are evolving to specifically address program quality and course effectiveness
- levels of student deficiencies are addressed in these assessments
- data are available to address specific questions regarding program description, number of occupational students, proportion of students successfully completing developmental programs, comparative success rates between developmental and nondevelopmental students, average time involved in developmental activities, and program cost.

First cycle findings as related to these concerns, and other issues that emerged during the course of this study, are subsequently summarized.

This project has resulted in a profiling of remedial, developmental, basic skill efforts found in the two-year colleges across New York State as of the spring of 1983. Programs consistently change as necessitated by budgetary revisions, the search for better programs, or changing clientele characteristics. Thus it is anticipated that some changes are currently in place which may not be reflected in these data.

Developmental/remedial/basic skill programs incorporate components to address writing, reading, and math skill deficiencies. Study skills are often part of reading or writing, and although an emphasis, not often designated separately. Remedial or developmental instruction is most commonly delivered through formal courses. These courses may, both among and within colleges, carry credit (when accepted by a program as counting for graduation), college equivalent credit, no credit or in some combination.

Most programs have established entrance criteria with a majority using placement testing to determine the level of deficiency often followed by mandatory placement. Those programs not using mandatory placement are making strong recommendations and attempting follow-up as necessary. Most programs have also established exit criteria, often identified as achieving course requirements.

Supplemental or supportive activities to coursework provide reinforcement and follow-up as necessary, and vary among colleges depending upon local program structure and need. Tutoring assistance, counseling, targeted advisement, learning center/laboratory and designated transitional courses are most common. Others, such as computer-assisted instruction, are in planning stages at several colleges, with several indicating a need for further information about the strategy.

Faculty members are often based in academic departments, some are specified for developmental programs, and most frequently it is a combination of both sources. The budget correlates with faculty source---designated as departmental, central, specified or a combination of central and departmental.

Students are usually engaged in some aspect of developmental/remedial/basic skill offerings until adequate competence is attained to function in regular courses. The majority of formal courses are one semester in length with a second semester available at many colleges, and in fewer instances, a third or additional semester(s). A "how long" question is tied to the extent of deficiency and program focus. Are the offerings sufficient and appropriate for clientele deficiencies becomes a more pertinent query.

Program cost has been aggregated by using specific data from colleges combined with appropriate demographics available from the SUNY Research Office. In essence, the cost of these programs in any one academic year is contingent upon rank and level of the instructors, scope of the program, resources available to the instructional process, program make-up and degree of deficiencies exhibited by students. Learning center and other support services serve the total college population and as such, are often viewed as both a developmental as well as a general college expense.

Terminology related to these programs remains an issue. Each college tends to use a term (remedial, developmental, basic skills) to describe their offerings but there is no statewide consensus on which term or terms should be used. Unfortunately, this lack of common definition of terms becomes critical in any comprehensive assessment. The status of credit regarding efforts which may be defined as developmental or remedial is another issue rooted in lack of consensus of program terms. During the first phase of this study there has been no attempt to distinguish between the terms "developmental" or "remedial" or "basic skills," but the terms have been used in tandem to reflect similar usage among the colleges. As yet, few campuses have attempted to make any real distinction.

Based on consensus of data regarding priority criteria, program success is viewed in sequential levels, from the immediate to the long-term---beginning with completion of exit requirements for developmental/remedial courses followed by completion of the next regular career program course, leading to eventual completion/

graduation from the career program or attainment of individual goals.

With an emerging priority for quality and excellence, developmental studies/remedial/basic skills programs are under increasing scrutiny largely due to the level of instruction offered. The days when access and full opportunity were sufficient program justification have passed. Yet most two-year institutions continue to be philosophically committed to provide an opportunity to students with deficiencies in basic skills. However, in large measure, program success is still often viewed as a function of providing.

Most colleges collect data for assessing developmental programs that deal with number of students and performance within the remedial courses. Fewer colleges systematically collect data on student successes at subsequent time points. For more adequate evaluations, data are needed that indicate success rates in subsequent regular career courses. Also, increased consideration of individual student goals would lead to more valid program assessments by more accurate definitions of success.

Several sites have shared retention rates which indicate that students taking developmental/remedial/basic skills courses compare favorably to overall institutional retention rates. A problem occurs when a standard, like an acceptable retention rate for the college as a whole, is not readily known. But even if a standard is known, the question remains as to what extent should developmental/remedial students be expected to meet the same criteria as nondevelopmental students?

Most involved staff members recognize the correlation of client capability to program success. Too, there are concerns regarding expectations held for the programs given the range of deficiencies and multiple needs of students. Several local studies have been shared which suggest that students who took remedial courses, in comparison to those who did not, historically exhibit a higher retention level. There is a hesitancy in highlighting these data because of the number of related factors not controlled for in these local comparative studies. Differences may well be due to reasons outside the scope of the program. Some staff members reveal that about 10% of students in developmental/remedial courses do, out of their own volition, return to the instructor and indicate that without the experiences of the course or instructional support they would not have been able to succeed in regular courses. Although not systematic, these data are often perceived by staff as more meaningful to program assessment than gross numerical comparisons which mask individual successes.

Many colleges are in initial stages of developing more

systematic evaluation of their developmental/remedial/basic skill programs. As a consequence, there is widespread interest and concern about the kinds of data that should be collected as well as those being collected. At this point in time, the data most frequently collected are those that fall within the responsibility of coordinators or faculty (such as number enrolled, percentage that successfully meet exit criteria of developmental courses, or retention rate on a semester basis for these courses). Other information, such as retention data for subsequent regular courses, may be available in some format at a centralized research or administrative office, but may not commonly be viewed as easily accessible by some staff members.

Lack of awareness of what college-wide data are available impacts specific data elements such as the percentage of occupational students in developmental programs. Although less than 30% of the colleges indicate they are in a position to readily identify the proportion of students in developmental programs who are career students, many assume that the ratio reflects the general college-wide proportion of career/technical to transfer program enrollments. The apparent lack of information about occupational student enrollment is a function of intent and role of the program. It is quite possible that although coordinators may not be aware of occupational students such data may well be available elsewhere in the college. Also, some colleges do not allow program designation until remediation is completed.

In planning for more systematic evaluation, one technique that is increasingly viewed as a viable strategy is tracking individual student progress throughout their college experience. This kind of comprehensive information is perceived to provide a better basis for curricular planning as well as for assessment of effectiveness at sequential stages. Also in looking ahead to evaluation; several data elements are viewed as ideal data strands. Developmental/remedial program quality or effectiveness is a growing state-wide concern of faculty, staff and administrators.

Thus, two-year college staff reach a majority consensus on three priority success criteria which reflect sequential levels through which students proceed. Staff recognize the implications of the degree of student deficiencies to program assessment as planning for more comprehensive evaluations continues to increase. As previously summed some data are currently available which address some of the more specific research questions.

Implications of Findings

As noted earlier many of these findings at the state level are similar to the results of a recent national study involving over 1400 two and four year colleges; particularly the status of program assessment as illustrated by the

following quote:

> "...had hoped that programs that had been under such scrutiny for the last two decades would be more inclined to account for themselves. Thus,...dismayed to find that...reported retention data gave rise to suspicion that collection procedures were not yet in place...in most institutions...that respondent[s] [were] making a best guess. Moreover, among institutions that did collect data, the trend was reporting program retention figures. Thus, few institutions could provide the equally important subsequent retention figures for follow-on courses" (Rouche 1983).

Thus an absence of evaluation activities exists at the national level.

In New York State evaluative procedures are more apt to be present than are standards of success either specifically or implicitly for the college as a whole. Thus, assessment of a specific program lacks a basis for comparison to a college-wide standard. At this point in the research no statement generalizable across the state's developmental/remedial programs can be made in regard to standards for effectiveness, especially if effectiveness is to be measured against an unknown college-wide expectation.

A standard of effectiveness often remains as "The best we can do." But given the emerging emphasis on quality, this cannot continue to serve as an adequate response. More comprehensive assessments may result in local college success rates being more readily available. But these same data may be used to identify the kind of student that perhaps would not be allowed entry to maximize the investment of public funds should that become the sole criterion.

In New York State, several program coordinators/faculty recognize performance in subsequent courses as critical to program evaluation especially at those institutions planning to implement a tracking system or to take advantage of information already stored by computer. In other instances, the longer term broader concerns are left to administrators or the unique coordinator/staff member with opportunity to look beyond immediate responsibility.

Any qualitative indicator is ultimately related to the level of deficiencies exhibited by students. No one model of programming can be more successful than another, separate from the academic deficiencies of the students in the program. If students need help in organization or in study habits, they are far more likely to demonstrate success however defined than students with a reading deficiency below a high school level. Tracking students from entry and assessment of deficiencies throughout remediation into sequential regular courses may help in the determination of a success standard at least on a college-by-college basis.

The data indicates the existence of a state-wide concern for betterment of developmental/remedial/basic skill programs combined with a general willingness to attempt more effective and comprehensive program evaluation. Concurrently there is widespread recognition of existing issues, and of several problems and questions which need further study and concern including:

1) To what extent should institutions establish college-wide success standards which could then serve as the basis for evaluating specific programs? More germane to developmental/remedial programs, can performance standards be set which would be politically, socially, and academically acceptable?

2) To what extent are questions related to effectiveness of developmental programs merely reflective of questions appropriate to all programs regardless of content?

3) Are developmental/remedial/basic skill programs expected to evaluate more systematically and more critically than other programs? If so, should they?

4) Are there problems in reconciling the access mission of the community college with emerging priorities of quality and excellence?

5) To what extent should developmental/remedial programs in two-year colleges be expected to overcome extreme student basic skill deficiencies? In light of the range of these deficiencies are placement procedures and entrance criteria valid as predictors of student needs? Is what's being taught appropriate to student needs?

6) To what extent can some consensus be reached regarding terminology?

If so, how would such consensus facilitate response to related issues (such as credit status, structure, philosophy, and evaluation)?

7) What is the feasibility of systematically collecting data that indicate the extent to which the skills taught in developmental/remedial courses are used as tools for learning career content? What role do these skills play in the achievement of individual student goals?

Project staff have heard administrators and faculty address these questions from the perspective of their local programs, students and financial constraints. The responses have several common threads: more comprehensive evaluation could be done if money and staff were available. "Success" could be improved by more selective admissions but this is not an acceptable solution. While success criteria are generally agreed upon no one criterion is perceived to be sufficient given the range of factors impacting success. A consensus among colleges on common standards of program success does not currently exist. Many believe that such common standards would be inappropriate given the differences among colleges, their programs and particularly their students.

Future project activities will continue to address as many of the critical concerns and questions within the context of today's two-year college in New York State as is feasible within the project format and timeline.

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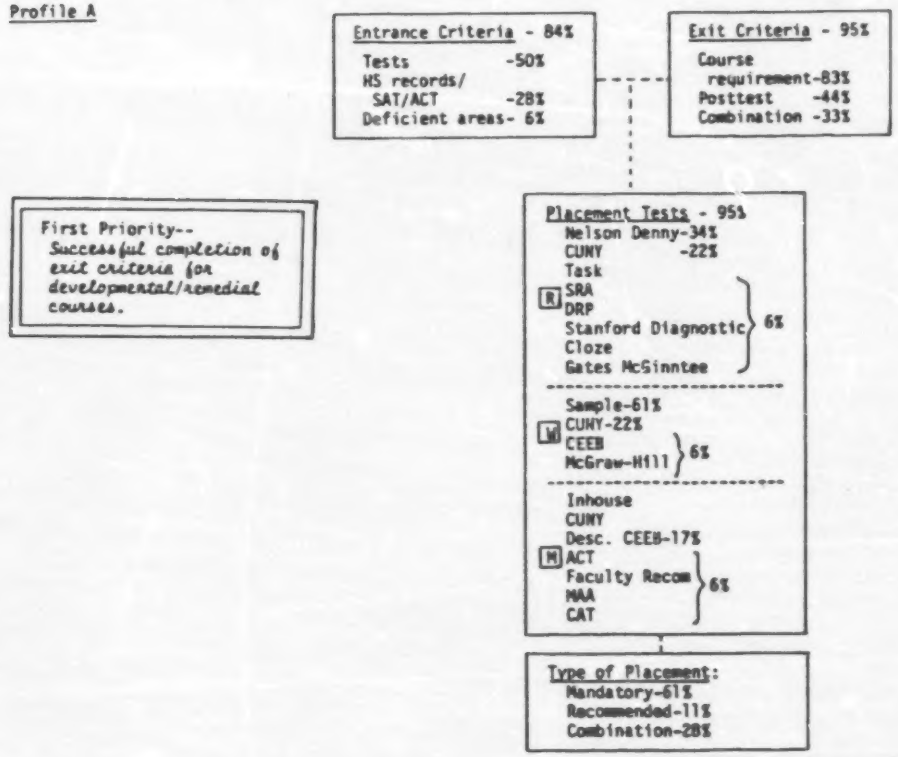
Attachment I

Priority Criteria as Compared to Program Profile

Profile A



N = 18

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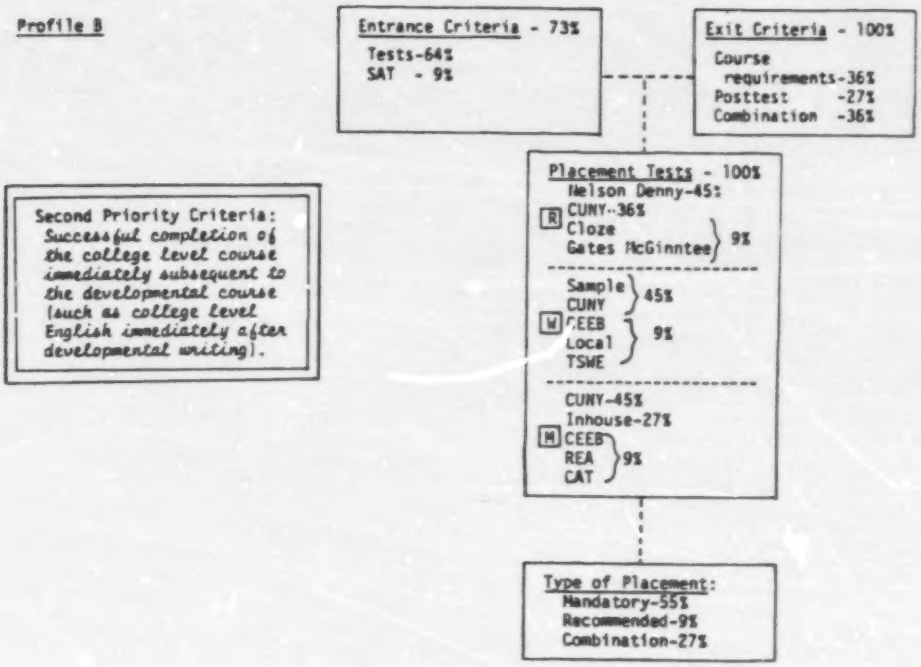
Profile B



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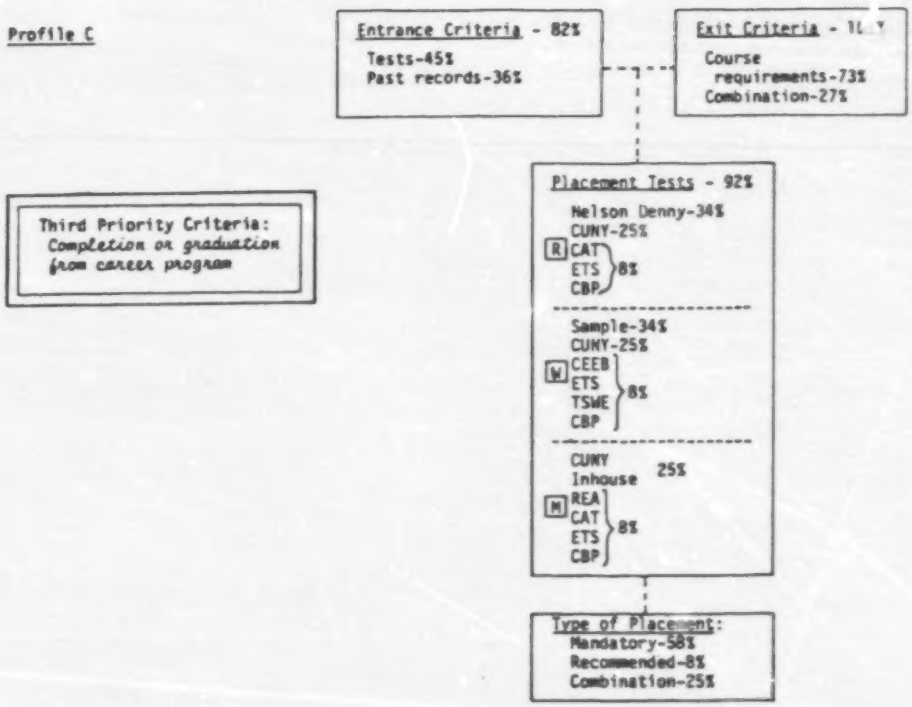
Profile C



N = 12

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Attachment II

Matching Selections of Two Major Program Criteria

Two sets of nine colleges agreed upon two criteria. One set chose successful completion of the regular course in sequence after the developmental/remedial course, and completion or graduation from the career program; the other set, successful completion of exit criteria and successful completion of the next regular course. Both sets included the priority criteria but varied as to which of the three.

Two sets of eight colleges agreed upon two criteria which also included various arrangements of the priority criteria. In addition academic status/standing subsequent to completing developmental/remedial courses was also frequently selected. One set of six colleges matched on a combination of graduation from the career program and subsequent academic status criteria. Other agreements on two criteria were found for two sets of five colleges, two sets of four colleges, six sets of three colleges, and four sets of two colleges. In the majority of matchings, at least one criterion reflected the three priority criteria or the GPA/academic status criterion.

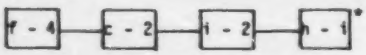
In summary, achieving exit criteria of courses was identified in 7 of 18 pairs (39%); completion/graduation from career program, and completion of next regular course appeared in 6 of 18 pairs (34%); achievement of student goals, and academic status/grade point average in a semester subsequent to remedial work appeared in 5 of 18 pairs (28%); academic eligibility to continue in chosen program appeared in 3 of 18 pairs (17%).

Over 46% selected completion/graduation from career programs as a third criteria; 41% chose completion of the subsequent college level course or achievement of exit criteria; 20.5% achievement of student goals; 17.9% academic status the subsequent semester; 15.4% the academic eligibility to continue or an increase in student motivation; and 10.3% successful completion of career course requirements at a series of time points.

Matching Selections of Two Major Program Criteria

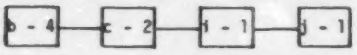
9 colleges - d: Successful completion of the college level course immediately subsequent to the developmental course (such as college level English immediately after developmental writing).
b: Completion/graduation from career program.

plus



9 colleges - f: Successful completion of exit criteria for developmental/remedial courses.
d: Successful completion of the college level course immediately subsequent to the developmental course (such as college level English immediately after developmental writing).

plus



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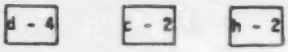
8 colleges - b: Completion/graduation from career program.
f: Successful completion of exit criteria for developmental/remedial courses.

plus



8 colleges - f: Successful completion of exit criteria for developmental/remedial courses.
c: Academic status/standing and/or grade point average at the conclusion of the first semester subsequent to completion of developmental/remedial courses.

plus

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6 colleges - c: Academic status/standing and/or grade point average at the conclusion of the first semester subsequent to completion of developmental/remedial courses.
b: Completion/graduation from career program.

plus

(continued...)

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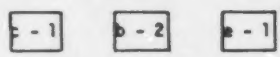
5 colleges - d: Successful completion of the college level course immediately subsequent to the developmental course (such as college level English immediately after developmental writing).
c: Academic status/standing and/or grade point average at the conclusion of the first semester subsequent to completion of developmental/remedial courses.

plus

5 colleges - f: Successful completion of exit criteria for developmental/remedial courses.
h: Academic eligibility to continue in chosen program.

plus



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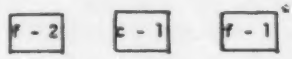
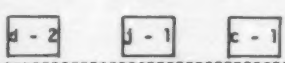
4 colleges - h: Academic eligibility to continue in chosen program.
b: Completion/graduation from career program.

plus



4 colleges - f: Successful completion of exit criteria for developmental/remedial courses.
i: Achievement of the goal(s) held by individual students when enrolling.

plus



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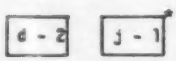
3 colleges - f: Successful completion of exit criteria for developmental/remedial courses.
j: Demonstrated increase in student's motivation to achieve.

plus

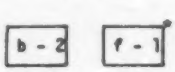
3 colleges - i: Achievement of the goal(s) held by individual students when enrolling.
b: Completion/graduation from career program.

plus



3 colleges - h: Academic eligibility to continue in chosen program.
c: Academic status/standing and/or grade point average at the conclusion of the first semester subsequent to completion of developmental/remedial courses.

plus



(continued...)

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3 colleges - e: Successful completion of career course requirements at a series of time points after completion of developmental/ remediation courses.
c: Academic status/standing and/or grade point average at the conclusion of the first semester subsequent to completion of developmental/ remedial courses.

plus

[f - 1] [d - 1] [b - 1]*

3 colleges - j: Demonstrated increase in student's motivation to achieve.
i: Achievement of the goal(s) held by individual students when enrolling.

plus

[b - 1] [d - 1] [f - 1]*

3 colleges - d: Successful completion of the college level course immediately subsequent to the developmental course (such as college level English immediately after developmental writing).
j: Demonstrated increase in student's motivation to achieve.

plus

[f - 2] [h - 1]*

---

2 colleges - g: A positive attitude towards self-directed learning and reading/writing for personal enjoyment.
f: Successful completion of exit criteria for developmental/remedial courses.

plus

[j - 1]*

2 colleges - b: Completion/graduation from career program.
i: Achievement of the goal(s) held by individual students when enrolling.

plus

[j - 1] [d - 1]*

2 colleges - h: Academic eligibility to continue in chosne program.
d: Successful completion of the college level course immediately subsequent to the developmental course (such as college level English immediately after developmental writing).

plus

[b - 1] [j - 1]*

(continued...)

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2 colleges - i: Achievement of the goal(s) held by individual students when enrolling.
d: Successful completion of the college level course immediately subsequent to the developmental course (such as college level English immediately after developmental writing).

[f - 1] [b - 1] *

Frequency sum of criteria per 2 or more pairs--

f in 7 of 18 pairs - 39%
b, d in 6 of 18 pairs - 34%
i, c in 5 of 18 pairs - 28%
h in 4 of 18 pairs - 23%
j in 3 of 18 pairs - 17%

Frequency of selection of a third criteria--

b - 18 colleges - 46.2%
f, d - 16 colleges - 41.0%
i - 8 colleges - 20.5%
c - 7 colleges - 17.9%
h, j - 6 colleges - 15.4%
e - 4 colleges - 10.3%

* [Criterion letter & number of colleges selecting that criterion]

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Attachment III

Program of Priority Criteria and Data Elements Collected

1. Successful completion of exit criteria for developmental/remedial courses.

   Data Collected Systematically by over 50% of identifying group:

   a) Total number of students enrolled in developmental/remedial courses.
   c) The number or percentage of students who successfully meet exit criteria of the developmental/remedial courses.
   d) The number/percentage of students who complete the developmental/remedial requirements and enroll (subsequently or concurrently) in regular career courses.
   f) A retention rate on a semester basis for students in remedial courses.
   g) The number/percentage of career students completing developmental requirements and go on to successfully complete the first sequence of college level courses.
   j) Percentage of students who successfully meet your success criteria #1, 2, and 3 (identified in question C).

2. Successful completion of the college level course immediately subsequent to the developmental course (such as college level English immediately after developmental writing).

   Data Collected Systematically by over 50% of identifying group:

   a) Total number of students enrolled in developmental/remedial courses.
   b) Number of occupational students enrolled in developmental/remedial courses and program.
   c) The number or percentage of students who successfully meet exit criteria of the developmental/remedial courses.
   d) The number/percentage of students who complete the developmental/remedial requirements and enroll (subsequently or concurrently) in regular career courses.
   g) The number/percentage of career students completing developmental requirements and go on to successfully complete the first sequence of college level courses.
   f) A retention rate on a semester basis for students in remedial courses.
   j) Percentage of students who successfully meet your success criteria #1, 2, and 3 (identified in question C).
   k) The reasons for nonpersistence in light of student goals.
   o) The effectiveness of supplementary assistance (such as tutoring, peer tutoring, professional tutoring, voluntary laboratory sessions, mediated materials, etc.).

3. Completion or graduation from career program.

   Data Collected Systematically by over 50% of identifying group:

   a) Total number of students enrolled in developmental/remedial courses.
   b) Number of occupational students enrolled in developmental/remedial courses and program.
   c) The number or percentage of students who successfully meet exit criteria of the developmental/remedial courses.
   d) The number/percentage of students who complete the developmental/remedial requirements and enroll (subsequently or concurrently) in regular career courses.
   f) A retention rate on a semester basis for students in remedial courses.

Total N=28 colleges

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INITIAL SITE QUESTIONNAIRE

Developmental Studies Project

Two-Year College Development Center, SUNY-Albany

The purpose of this questionnaire is twofold:

1) to determine the extent to which the definition of success is appropriate to your program,

2) to determine the extent to which data or evidence is currently available relative to criteria encompassed by the definition.

College Name _____ Program Coordinator/Project Contact _____

Ia) How would you generally characterize your remedial/developmental offerings?

___*program of designated courses--* ___*credit* ___*non-credit*
___*learning resource center*
___*learning resource center plus courses*
___*integration of developmental skills with content instruction*
___*other--please specify:* _____

_____

b) Since many colleges have unique characteristics, briefly describe your local developmental program (entrance and exit criteria, selection processes, courses, etc.).

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11. *Success for developmental programs is generally defined as the academic eligibility to continue and complete a program of career studies. The definition is further specified by assessments at a series of time points including:*

- *entrance criteria and/or procedures used to enroll students in skill programs;*
- *student performance and completion of these programs as measured by exit criteria;*
- *student performance and completion of initial (one or two) often concurrent career area courses;*
- *academic status, standing and/or grade point average at the conclusion of the first semester subsequent to completion of developmental courses;*
- *retention rate by subsequent semester(s) as selected;*
- *completion/graduation from career program;*
- *withdrawal at time points due to a conscious decision to terminate academic plans even though academically eligible to continue.*

a) Is the definition of success compatible with your program?

____ *yes*

____ *not really*

____ *in part*

b) If <u>not really</u> or <u>in part</u>, what modifications would you suggest?

III. For the following data elements, please check the appropriate column indicating their availability at this point in time.

Data Elements	Readily Available	Could Be Collected with Minimal Effort	Not Readily Available	N.A.
1. total number of students enrolled in developmental programs				
2. number of occupational students enrolled in developmental programs				
3. number of occupational students who complete developmental program				
4. number of developmental completers (occupational) enrolled in regular courses				
5. average time needed to complete developmental program				
6. number of developmental students who complete career programs				
7. enrollment & successful completion of initial career skill courses by developmental students (may be concurrent with basic skill courses)				

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Data Elements	Readily Available	Could Be Collected with Minimal Effort	Not Readily Available	N.A.
8. success rate (academic status or GPA) of developmental students compared to non-developmental students in regular career programs at end of - first semester - second semester - fourth semester - graduation				
9. retention rate by semester for students in basic skill developmental programs				
10. reasons why leavers did not persist				
11. effectiveness of selection procedures				
12. availability of supplemental assistance				
13. existence of entrance and exit measures clearly communicated to students				
14. enrollment processes clearly communicated to college community				
15. program cost per student or contact hour				
Other data elements that should be included: _____ _____ _____				

SITE RESPONSE SHEET

May 1983

Assessment of Effectiveness: Developmental Programs
in Postsecondary Occupational Education

(VEA 53-83-0349)

Two-Year College Development Center
State University of New York at Albany

. . . . . .

College _____

Contact Person _____

Please check and respond as appropriate.

1. ☐ Yes, you may share the: ____ summary as edited
____ outline as edited
____ both/either

☐ No, we are not able to participate in sharing either the summary or outline of our program.

2. If possible, please respond briefly: *How would you rate the effectiveness of the developmental/remedial courses at your college?*

Very effective			Moderately effective			Not effective
1	2	3	4	5	6	7

On what do you base your assessment?

_____

_____

_____

3. Will your schedule allow a second visitation from us this summer to discuss, in greater detail, selected aspects of your program, and project findings, results and/or outcomes to date?

Please check preferred month and suggest dates:

☐ June; suggested dates - _____

3. (continued)

☐ July; suggested dates - _____

☐ August; suggested dates - _____

☐ September; suggested dates - _____

4. Topic identified as a potential concentration at this site: _____

_____

_____

_____

a) Is the topic accurate? ☐ Yes ☐ Not quite ☐ No

If not quite or no, please revise/elaborate: _____

_____

_____

b) Should we plan to devote a portion of our second visitation to discussion and planning for this topic in detail and if appropriate, toward beginning activity in the fall, assuming continued project funding?

☐ Yes ☐ No

Please explain/advise as appropriate: _____

_____

_____

_____

_____

Please return completed form as soon as possible to:

Dr. LaVerna M. Fadale
Project Director
Two-Year College Development Center
State University of New York at Albany
135 Western Avenue, Draper 305
Albany, New York 12222

Appendix C

DEVELOPMENTAL STUDIES QUESTIONNAIRE

STATEWIDE SURVEY

Two-Year College Development Center
State University of New York at Albany

Spring 1983

Directions: Please respond as appropriate to your local developmental or remedial courses or program. "Developmental" and "remedial" are being used interchangeably to denote courses and other instructional activities designed to help students overcome deficiencies in basic learning skills (reading, writing, math, etc.); may be credit, equivalent or noncredit and are scheduled prior to or concurrent with regular courses. Please attach any additional materials that you feel will be useful to our better understanding of your program. Thank you for your cooperation.

_____ (College Name)

_____ (Name/Title of person completing this form)

A. Although some developmental/remedial program characteristics are similar from college to college, others are locally unique. Would you briefly describe your program by checking appropriate items and providing specific information for each checked item?

1) ___Entrance criteria exist. Please describe: _____

_____

_____

2) Program consists of:

a) ___Reading

___courses (___credit; ___noncredit; ___college equivalent credit)
___modules
___laboratory/learning center
___other: _____

b) ___Writing

___courses (___credit; ___noncredit; ___college equivalent credit)
___modules
___laboratory/learning center
___other: _____

c) ___Math

___courses (___credit; ___noncredit; ___college equivalent credit)
___modules
___laboratory/learning center
___other: _____

d) ___Other (or for use if your course combines several skill areas such as reading, writing, study skills)

_____

_____

3) Time frame for remedial courses:

	Math	Reading	Writing	Other: _____
one semester				
two semesters				
three semesters				
other: _____				

4) Placement testing:

	Test Used	Cut-off Score/Level
a) ___Reading		
b) ___Writing		
c) ___Math		
d) ___Other		

(Use backs of sheets for additional space.)

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5) Placement:

a) Mandatory placement (___math; ___reading; ___writing; ___other)
b) Recommended placement (___math; ___reading; ___writing; ___other)
c) Student decision to enroll (___math; ___reading; ___writing; ___other)
d) a, b, c above (circle) plus re-test during first few classes (___math; ___reading; ___writing; ___other)

6) Exit criteria:

a) ___Course requirements
b) ___Post-test; please identify: _____
c) ___Re-test; please identify: _____
d) ___Other: _____

7) Instructors of developmental/remedial courses:

a) ___Faculty specifically identified as developmental/remedial
b) ___Faculty members from departments teaching selected courses
c) ___Combination of a and b
d) ___Other: _____

8) Source of program budget:

a) ___Special budget for developmental/remedial program
b) ___Centralized budget
c) ___Departmental budget
d) ___Combined centralized and departmental budget
e) ___Other: _____

B. From the following list of phrases, check those that best characterize the additional services that supplement the developmental/remedial courses at your college:

a) ___Reinforcement of basic skills in content classrooms and/or professional development program to encourage reinforcement in content courses.

b) ___Designated college level courses as introductory or transitional for students deficient in some academic skills.

c) ___Centralized laboratory/learning center

d) ___Mediated materials

e) ___Tutoring assistance

f) ___Computer assisted instruction

g) ___Counseling/targeted advisement

h) ___Peer support groups

i) ___Other, please specify: _____

C. Of the following, which are major success criteria for your program? Please rank those selected in order of priority (not more than three).

a) ___Withdrawal at various time points due to a conscious decision to terminate or change academic plans, even though academically eligible to continue.

b) ___Completion or graduation from career program

c) ___Academic status/standing and/or grade point average at the conclusion of the first semester subsequent to completion of developmental/remedial courses.

d) ___Successful completion of the college level course immediately subsequent to the developmental course (such as college level English immediately after developmental writing).

e) ___Successful completion of career course requirements at a series of time points after completion of developmental/remediation courses.

f) ___Successful completion of exit criteria for developmental/remedial courses.

g) ___A positive attitude towards self-directed learning and reading/writing for personal enjoyment.

h) ___Academic eligibility to continue in chosen program.

i) ___Achievement of the goal(s) held by individual students when enrolling.

j) ___Demonstrated increase in student's motivation to achieve.

k) ___Other, please specify: _____

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D. Some success-related information is collected on a regular basis. A list of potentially useful data sets follows. Please check whether they are collected as part of your program, are not appropriate to your program, or that ideally they should be collected but are not due to any number of local constraints.

Data Elements	Collected Systematically	Ideally Should Be Collected	Not Appropriate
a) Total number of students enrolled in developmental/remedial courses.			
b) Number of occupational students enrolled in developmental/remedial courses and program.			
c) The number or percentage of students who successfully meet exit criteria of the developmental/remedial courses.			
d) The number/percentage of students who complete the developmental/ remedial requirements and enroll (subsequently or concurrently) in regular career courses.			
e) An average time period needed by a majority of students to eliminate skill deficiencies.			
f) The number/percentage of students who meet remedial exit requirements and then successfully complete career programs.			
g) The number/percentage of career students completing developmental requirements and go on to successfully complete the first sequence of college level courses.			
h) A GPA comparison of students completing remedial requirements as compared to students of matched ability who did not enroll in remedial courses; and both groups now enrolled in career programs.			
i) A retention rate on a semester basis for students in remedial courses.			
j) Percentage of students who successfully meet your success criteria #1, 2, and 3 (identified in question C).			
k) The reasons for nonpersistence in light of student goals.			
l) The extent to which entrance and exit criteria requirements are clearly communicated to students.			
m) The extent to which enrollment procedures are clearly communicated to the college community.			
n) The comparable costs per student or contact hour for remedial/ developmental and for nondevelopmental students.			
o) The effectiveness of supplementary assistance (such as tutoring, peer tutoring, professional tutoring, voluntary laboratory sessions, mediated materials, etc.).			
p) Other, please specify: _____			
_____			
_____			
_____			
_____			

Thank you for your cooperation. Please return on or before May 18 to:

Dr. LaVerne N. Fadale
Two-Year College Development Center
SUNY-Albany
135 Western Avenue, Draper 306
Albany, NY 12222

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Association of Two-Year College Chief Academic Officers

April 29, 1983

---

1. How would you generally characterize the remedial/developmental offerings at your college?

   a) _____ a learning center for supplementary instruction
   _____ a set of designated courses (____cr. ____non-cr. __ _cr. equivalent)
   _____ a learning center plus courses (____cr. ____non-cr. ____cr. equivalent)
   _____ skill reinforcement within regular class instruction
   _____ other: _____

   b) _____ operational responsibility rests with academic department(s)
   _____ operational responsibility rests with a program co-ordinator/director
   _____ other: _____
   _____

2. Of the following which are major success criteria for the remedial/developmental effort at your college? Rank the top 3 in order of priority.

   a) _____ Withdrawal at various time points due to a conscious decision to terminate or change academic plans, even though academically eligible to continue.
   b) _____ Completion or graduation from career program.
   c) _____ Academic status/standing and/or grade point average at the conclusion of the first semester subsequent to completion of developmental/remedial courses.
   d) _____ Successful completion of the college level course immediately subsequent to the developmental course (such as college level English immediately after developmental writing).
   e) _____ Successful completion of career course requirements at a series of time points after completion of developmental/remediation courses.
   f) _____ Successful completion of exit criteria for developmental/remedial courses.
   g) _____ A positive attitude towards self-directed learning and reading/writing for personal enjoyment.
   h) _____ Academic eligibility to continue in chosen program.
   i) _____ Achievement of the goal(s) held by individual students when enrolling.
   j) _____ Demonstrated increase in student's motivation to achieve.
   k) _____ Other, please specify: _____

ASSESSMENT OF EFFECTIVENESS: DEVELOPMENTAL PROGRAMS IN POSTSECONDARY OCCUPATIONAL EDUCATION
VEA 53-83-0349

Two-Year College Development Center
State University of New York at Albany
135 Western Avenue, DR 306
Albany, New York 12222

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SUNY Association of Two-Year College Student Personnel Officers

June 29, 1983

---

1. How would you generally characterize the remedial/developmental offerings at your college?

   a) _____ a learning center for supplementary instruction
   _____ a set of designated courses (____cr. ____non-cr. ____cr. equivalent)
   _____ a learning center plus courses (____cr. ____non-cr. ____cr. equivalent)
   _____ skill reinforcement within regular class instruction
   _____ other: _____

   b) _____ operational responsibility rests with academic department(s)
   _____ operational responsibility rests with a program co-ordinator/director
   _____ other: _____
   _____

2. Of the following which are major success criteria for the remedial/developmental effort at your college? Rank the top 3 in order of priority.

   a) _____ Withdrawal at various time points due to a conscious decision to terminate or change academic plans, even though academically eligible to continue.
   b) _____ Completion or graduation from career program.
   c) _____ Academic status/standing and/or grade point average at the conclusion of the first semester subsequent to completion of developmental/ remedial courses.
   d) _____ Successful completion of the college level course immediately subsequent to the developmental course (such as college level English immediately after developmental writing).
   e) _____ Successful completion of career course requirements at a series of time points after completion of developmental/remediation courses.
   f) _____ Successful completion of exit criteria for developmental/remedial courses.
   g) _____ A positive attitude towards self-directed learning and reading/writing for personal enjoyment.
   h) _____ Academic eligibility to continue in chosen program.
   i) _____ Achievement of the goal(s) held by individual students when enrolling.
   j) _____ Demonstrated increase in student's motivation to achieve.
   k) _____ Other, please specify: _____

ASSESSMENT OF EFFECTIVENESS: DEVELOPMENTAL PROGRAMS IN POSTSECONDARY OCCUPATIONAL EDUCATION
VEA 53-83-0349

Two-Year College Development Center
State University of New York at Albany
135 Western Avenue, DR 306
Albany, New York 12222

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